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Henry Peggott.

A

GENERAL HISTORY
OF THE
SCIENCE AND PRACTICE
OF
MUSIC,
BY
SIR JOHN HAWKINS.

A NEW EDITION,
WITH THE AUTHOR'S POSTHUMOUS NOTES.

VOL. I.

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LIFE OF
SIR JOHN HAWKINS,
COMPILED FROM
ORIGINAL SOURCES.

SIR JOHN HAWKINS, the friend and executor of Dr. Johnson, and a descendant of the Sir John Hawkins who commanded the Victory, and one of the four divisions of the fleet, as vice-admiral, at the destruction of the Spanish armada, was born in 1719. His father, an architect and surveyor, at first brought his son up to his own profession, but eventually bound him to an attorney, 'a hard taskmaster and a penurious housekeeper.' At the expiration of the usual term, the clerk became a solicitor, and by unremitting assiduity, united to the most inflexible probity, he, unfriended, established himself in a respectable business, while by his character and acquirements he gained admission into the company of men eminent for their accomplishments and intellectual attainments. He was an original member of the Madrigal Society, and at the age of thirty was selected by Mr. (afterwards Dr.) Johnson as one of the nine who formed his Thursday-evening Club in Ivy-lane; a most flattering distinction, which confirmed his literary habits, and powerfully influenced his future pursuits when, not many years after, he relinquished his profession.

In 1753, Mr. Hawkins married Sidney, the second daughter of Peter Storer, Esq., with whom he received an independent fortune, which was greatly augmented in 1759 by the death of his wife's brother. He then retired from all professional avocations, giving up his business to his clerk, Mr. Clark, who subsequently became chamberlain of the city of London. With this increase of wealth is connected an anecdote of far too honorable a nature to be omitted here. The brother of Mrs. Hawkins made a will, giving her the whole of his fortune, except a legacy of £500 to a sister from whom he had become alienated, and communicated the fact to Mr. and Mrs. Hawkins, who, by representing the injustice of this act, and by adding entreaty to argument, prevailed on him to make a more equitable distribution of his property, and an equal division was the consequence. 'We lost by this (says Miss Hawkins, her father's biographer) more than £1,000 a-year; but our gain is inestimable, and we can ride through a manor gone from us with exultation.'

Upon retiring from the law, Mr. Hawkins purchased a house at Twickenham, intending to dedicate his future

life to literary labour and the enjoyment of select society. But in 1771 he was inserted in the commission of the peace for the county of Middlesex, and immediately became a most active magistrate. Here his independent spirit and charitable disposition were manifested. Acting as a magistrate, he at first refused the customary fees; but finding that this generous mode of proceeding rather increased the litigious disposition of the people in his neighbourhood, he altered his plan, took what was his due, but kept the amount in a separate purse, and at fixed periods consigned it to the clergyman of his parish, to be distributed at his discretion.

Being about this time led, by the defective state of the Highways, to consider the laws respecting them, and their deficiencies, he determined to revise them, and accordingly drew up a scheme for an Act of Parliament, to consolidate the several former statutes, and to add such other regulations as appeared to him necessary. His ideas on this subject he published in 1763, in an 8vo. volume entitled 'Observations on the state of Highways, and on the Laws for amending and keeping them in repair;' subjoining a draught of the Act before-mentioned. This very bill was afterwards introduced into the House of Commons, and passing through the usual forms, became the Act under which all the Highways in the kingdom were for many years regulated, and which forms the nucleus of the statutes now in force.

Some time after this, a cause as important in its nature, if not so extensive in its influence, induced him again to exert himself in the service of the public. The Corporation of London, finding it necessary to rebuild the gaol of Newgate, at an expense, according to their own estimates, of £40,000, had applied to Parliament, by a bill brought in by their own members, to throw the onus of two-thirds of the outlay on the County of Middlesex. This the Magistrates of the County thought fit to resist, and accordingly a vigorous opposition was commenced under the conduct of Mr. Hawkins, who drew a petition accompanied by a case, which was printed and distributed among the members of both Houses of Parliament. This memorial became the subject of a day's discussion in the House of Lords, and in the Commons produced such an effect, that

the City of London, by their own members, moved for leave to withdraw the bill.

He was, in 1765, elected chairman of the Middlesex quarter-sessions.

Not long after this event, the rector and officers of the parish of St. Andrew's, Holborn, in which he was then a resident, solicited his assistance in opposing an attempt of the Corporation of London, to carry out a design which was fraught with injury to their interests. The City had projected opening a street from Blackfriars-bridge (then lately built) across the bottom of Holborn-hill, and as much farther northward as they might think proper. In the execution of this scheme, they had contemplated, among other changes, the bestowal of the Fleet prison (an intolerable nuisance) on their neighbours, the parishioners of St. Andrew's, by its removal to the spot on which Ely House then stood. They had accordingly entered into a treaty with the then bishop of Ely, and were exerting all their influence to drive a bill through the House of Commons, which should confirm that contract, and enable the bishop to alienate the inheritance. The inhabitants of the neighbourhood, together with the earl of Winchelsea, the ground landlord, reasonably alarmed at this project, determined to oppose it throughout, and to this end applied to Mr. Hawkins for his aid. He accordingly drew two petitions, one in behalf of the rector and churchwardens, and the other in that of lord Winchelsea, with a case for each, containing the reasons on which they rested their opposition. These, like his previous endeavours, were successful, and the application of the City of London failed. For this assistance, the parish not content with returning him their thanks, determined to expend £30 in the purchase of a silver cup to be presented to him, a resolution which was shortly afterwards carried into effect. During this time his literary reputation had become so highly established, that the University of Oxford, meditating a re-publication of Sir Thomas Hanmer's Shakespeare, in 6 vols. 4to, with additional notes, applied to him to furnish them. This he accordingly did, and on the issue of the work, received from the University a copy as a present—a favor the more to be esteemed as but six copies of the impression were thus given. Of these the King received one, the Queen another, the King of Denmark a third, and Mr. Hawkins a fourth. To whom the other two were presented is now not known. In 1770, a charge was delivered by him, in his capacity of Chairman of the Quarter Sessions, to the grand jury of Middlesex, which, at their general request, was printed and published. During the years of which we have been speaking, popular discontent had occasionally risen high, and in the execution of his duty as a magistrate Mr. Hawkins had more than once been called into service of great personal danger; but his was not a character to shrink from peril in a good cause, and when the riots at Brentford broke out, as they did with great violence on various occasions, he and some of his brethren presenting themselves on the spot, effectually suppressed the tumult by their resolute demeanour.

When, too, the rising of the Spitalfields weavers took place, the Middlesex magistrates, and he at their head, attended at Moorfields, the scene of the disturbances, with a party of the Guards, and succeeded by their firmness and conduct in dispersing the mob, and repressing an outbreak which at one time seemed to threaten formidable results.

Having thus, on many occasions, given proofs of his courage, loyalty, and ability, he in 1772 received from his Majesty, George III., the honor of knighthood.

A fresh edition of Shakespeare being contemplated by Dr. Johnson and Mr. Stevens in 1773, he was, for the second time, requested to furnish notes to that author, which he accordingly did.

In 1775, the year in which it was determined to commence the disastrous American war, it being thought proper to carry up an address from the county of Middlesex to the King on the occasion, the magistrates, at his instance, voted one which he drew up, and had the honor of presenting to his Majesty in the October of that year.

It may not be out of place to notice here, an assertion made by Boswell in his *Life of Johnson*, vol. i. p. 168, that 'upon occasion of presenting an address to the King, he (Hawkins) accepted the *usual* offer of knighthood.' Without remarking on the spirit which has evidently actuated Boswell whenever he has spoken of Sir John, it is enough to state that no address whatever was presented in 1772 (the year in which he was knighted), or for some years previously; and, moreover, that there is strong reason to believe that the address of 1775, mentioned above (which was presented exactly three years *after* the date of his knighthood), was the only one in which he ever was concerned. Be this last as it may, the fact above mentioned sufficiently disproves the allegation. Even, however, if the honor had been attained as Boswell describes, it would have mattered little; for that he was not unworthy of it may be gathered from the fact, that the Earl of Rochford (then one of the Secretaries of State), when presenting him to the King for knighthood, took occasion to describe him as the best magistrate in the kingdom.

In the memorable year 1780, an order from the Privy Council having been issued through the Secretary of State's office, requiring the Middlesex magistrates to assemble for the preservation of the public peace, he and some others met early in the morning of Monday, the 5th of June, and continued sitting at Hicks's Hall, their Sessions House, till late in the evening. On the following day they did likewise; but at night, instead of returning to their own homes, they determined to form parties of two each, and thus to distribute themselves in those places where mischief was to be apprehended. This resolution was taken in consequence of the prevalence of a report that the mob intended to attack the houses of Lord North and of other members of the Administration, and also that of Lord Mansfield. As Sir John had long been honored with the friendship of the latter, he fixed

upon him as the object of his attention, and accordingly proceeded to his house, accompanied by a brother magistrate who resided in the neighbourhood. On their arrival they found Lord Mansfield writing to the Secretary of War for a party of the Guards, and the interval between the despatch of the application and the arrival of the troops was spent in conferences with his Lordship and the Archbishop of York (his neighbour), on the plan to be adopted. On Lord Mansfield's asking Sir John his intentions, he answered that his design was to place the men behind the piers which divided the windows, and to hold them in readiness to fire on the mob directly the demonstrations of the rioters rendered such an act necessary. To this, however, Lord Mansfield objected, from a dislike to bloodshed, and on the arrival of the troops, declined to take them into the house, sending them to the vestry at Bloomsbury, to remain there, in readiness to act, if their services should be required. As it appeared he did not wish to retain the magistrates, they retired, having arranged that Sir John should remain at the house of his colleague in Southampton-row, close by, till 12 P.M., at which time he intended, if all remained quiet, to return to his own home, as his Lordship would still have one magistrate in his immediate vicinity in case of any emergency. In Southampton-row he accordingly staid till past midnight, when, no disturbance having occurred at Lord Mansfield's, and a messenger arriving from Northumberland House to say that it was beset, and that the Duke had sent for Sir John, he proceeded thither.* On his arrival there, he found that a considerable mob was assembled in front of the house, but that no assault had yet been attempted. Proper precautions were immediately taken for its defence, and in order that the projected measures might be duly carried out, in the event of an outbreak, the Duke pressed Sir John to stay there the remainder of the night, which he accordingly consented to do. He was, however, very near paying dearly for his conduct, for, notwithstanding the lateness of the hour at which he entered Northumberland House, he had been recognised by the mob, who were heard to menace him with their vengeance. This threat they evidently intended to carry out, for on his return to his house in Queen's-square, Westminster, he discovered that it had been marked with a red cross, the symbol by which during that period the rioters devoted property to destruction. Being, fortunately for him, fully aware of the meaning of the sign, he immediately saw the necessity of erasing it. This, however, was no easy matter, for, from the crowds of people who had assembled in all parts of the town, there was great danger of any attempt to efface it being at once discovered. Placing himself, however, with his back against the wall, in the careless way in which an indifferent spectator might be supposed to stand,

* It was afterwards discovered that there had been an error in the message which he received. It had really been sent from Lord North's, in Downing-street, and not the Duke of Northumberland's. The similarity in the names probably originated the mistake, which might be further confirmed by the fact that the Duke, as Lord Lieutenant of the county, was a likely object of attack, at a time when every magistrate was favored with the detestation of the populace.

he passed his hand, in which was a handkerchief, behind him, and thus succeeded in totally obliterating the ill-omened symbol. Fortunately, his having done so was unnoticed; the mark was not renewed, and his house escaped the destruction which, the following night, overtook all others similarly distinguished.

When these tumults had in some measure subsided, it became necessary to bring to trial many persons who, by their participation in them, had become involved in the guilt of high treason; and it was therefore imperative that the grand jury of Middlesex, to whom the indictments were to be presented, should be instructed in the state of the law as bearing upon the offence in question. A message, at the instance of the Attorney-General, was accordingly sent to Sir John, desiring him to deliver, at the then ensuing session, a charge to the grand jury, explanatory of the duties required of them. This desire, at the moment it was made, was sufficiently embarrassing, for he was away from home, and consequently at a distance from the books he wished to consult; and, moreover, he had but forty-eight hours in which to prepare his address. Notwithstanding these disadvantages, he, however, constructed a charge which on its delivery was highly commended, and which the grand jury, after passing a vote of thanks to him for its 'learning and eloquence,' desired to have printed and published.

But to return to the narrative of his youth; from which this digression has been made in order to relate uninterruptedly the incidents of his magisterial career. Very early in life he cultivated music as the solace of his severer occupations—the recreation of his leisure hours. It was the society of the eminent that young Hawkins courted, and in the practice of the classical music of his day that he took delight. Immyns, and through him Dr. Pepusch, were his earliest musical associates. His daughter records an interesting anecdote of his acquaintance with Handel. She says:—

"Were I to attempt enumerating my father's musical friendships, I should copy, a second time, the greater part of the last volume of his History of Music; I will, however, record what I have heard and known of those between whom and himself this powerful union subsisted. Handel had done him the honor frequently to try his new productions in his young ear; and my father calling on him one morning to pay him a visit of respect, he made him sit down, and listen to the air of *See the conquering Hero comes*, concluding with the question, 'How do you like it?' my father answering, 'Not so well as some things I have heard of yours;' he rejoined, 'Nor I neither; but, young man, you will live to see that a greater favorite with the people than my other fine things.'

He was an original member of the 'Madrigal Society,' founded by the former in 1741. With Stanley he engaged in 1742, in the joint publication of some Canzonets of which Hawkins furnished the greater portion of the words, while Stanley composed the music.

Young men, accomplished in music, frequently find it an excellent introduction to company which otherwise they would hardly reach, and a recommendation to patrons by whom their legal or mercantile abilities might be overlooked. And so young Hawkins found: his Canzonets were sung and encored at Vauxhall, Ranelagh, and other places. The author of 'Who'll buy a heart?' was enquired after: amongst others, a Mr. Hare, a brewer, and musical amateur, who had often met Hawkins at Mr. Stanley's, invited him to his house. At Mr. Hare's he met his future father-in-law, Mr. Storer, who being a practitioner in a high grade of the law, but declining into years, found in the young amateur of music, first a valuable assistant, and afterwards a welcome husband for his daughter, and sharer of his opulence.

Some time previous to the publication of the Canzonets mentioned above, he had been well known in the literary world as the author of various contributions to the 'Gentleman's Magazine,' and other periodicals of similar description. These, being mostly anonymous, are now, of course, not easily traced. This much, however, is known: that they were not confined to any one subject, but embraced many different topics, and that they comprised both prose and poetry. A copy of verses to Mr. John Stanley, inserted in the *Daily Advertiser* for Feb. 21, 1741, and bearing date Feb. 19, 1740, is supposed to have been the earliest of his productions now known. But it was not only to the lighter occupation of literature that his attention was directed; for when, in the eventful year of 1745, the young Pretender published his manifesto, an answer to it, written by Mr. Hawkins, was widely circulated and read; and a series of papers on the same subject, furnished to the magazines and newspapers of the day, attested his attachment to the House of Hanover. His conduct, indeed, at this critical period, attracted the notice of the Duke of Newcastle, who wished to bring him into public life—'which attempt,' says a friend and contemporary of Sir John's, in writing to his son, 'was frustrated by your father's predilection for a studious life, and from a reserved disposition.' Nor was this the only occasion on which the honor was offered him, for in the same letter, dated Feb. 4, 1796, the correspondent, Mr. T. Gwatkin, of Eign, near Hereford, says—'When the noise was loud about Wilkes and liberty, Sir John's conduct as a magistrate, and his subsequent charges, met with the approbation of the Duke of Northumberland, the Lord Lieutenant for the county of Middlesex, who wished to introduce him into Parliament. I strongly urged him to accept the offer: my arguments made some impression; but he was then deeply engaged in the History of Music; besides he was, as I could easily collect from repeated conversations—although both from habit and theoretical reasoning entirely attached to the House of Hanover—jealous of his own personal independence. If, merely from personal interest, he could have been returned for a county or city, I believe he would have had no objection; but although he was a

'friend to the Administration, he did not choose to come into Parliament under the auspices of any minister. An offer was made him of placing you and your brother upon the foundation of King's Scholars at Westminster, and I pressed him to accept it, from the examples of Lord Mansfield and other great men who were upon the foundation, yet from the same principle of independence he rejected it.'

This letter, which certainly gives great insight into Sir John's character, would not have been quoted so much at length, did it not furnish the best possible refutation of the stigma cast upon him by Boswell—that, in his intercourse with Johnson, he betrayed an unworthy spirit of subserviency. Of this, however, it will be requisite to speak hereafter.

The motive that induced him to decline the offer of the presentation, was the feeling that the intention of the founder would be violated, if those who were in a position to pay for the education of their children, placed them on a foundation designed exclusively for 'poor scholars.'

In 1760, being in possession of some authentic and interesting documents relating to the author, he published an edition of Walton's 'Complete Angler,' with the second part by Cotton. To the original work he added notes, and wrote a life of Walton appending one of Cotton by the well-known Mr. W. Oldys: and that no means of making the work attractive might be neglected, he embellished it with cuts, designed by Wade, and engraved by Ryland, which are even at this time, when art has so much advanced, remarkable for their elegance. Of this work, three editions were sold off before the year 1784, when he published a fourth. For this, he had revised the life of Walton, and the notes throughout the work, and made large additions to both, while he re-wrote the life of Cotton in order to compress it, retaining, however, every fact respecting him mentioned in the former impressions, and subjoining several more. After his death, a fifth edition was published by his eldest son, who inserted the last corrections and additions found in Sir John's papers.

About the year 1770, the Academy of Ancient Music finding that, owing to the increase in the number of places of public amusement, and the consequent enlarged demands for eminent performers, their subscription of two guineas and a half was not sufficient to carry out the plan they had adopted, were obliged to solicit farther assistance. To this end Mr. Hawkins, then a member, drew up and published a pamphlet entitled 'An Account of the institution and progress of the Academy of Ancient Music, with a comparative view of the Music of the past and present times.' This was published in octavo in 1770, but without any author's name.

Hawkins had long been a member of all the best concerts in London; and when circumstances permitted him to make his own house a central point of assembly, the first musical men of the day flocked with pleasure to Austin Friars. Drs. Cooke and Boyce were among his

intimate friends; and Bartleman, then a boy, his protégé. He collected all the standard compositions of his own day, and of former times, and purchased, after the death of their owner, Dr. Pepusch's invaluable collection of theoretical treatises.* The idea of becoming the historian of the art he cultivated with so much ardour, is said to have been first suggested to him by the celebrated Horace Walpole: and when the inheritance of his brother-in-law rendered him independent of any involuntary labour, he seriously applied himself to the task. Of itself it was no easy one, and the multiplied demands which the duties of an active and presiding magistrate made upon his time considerably prolonged its duration. In this, as in all his other literary labours, his daughter, together with his sons, afforded the assistance of amanuensis, collator, and corrector of the press. In collecting his materials Sir John Hawkins was indefatigable—

'Nil actum reputans, si quid superesset agendum.'

He corresponded with every one from whom information could be hoped, and amongst others with Dr. Gostling, of Canterbury,† from whose collections and recollections he obtained much curious matter that no other person could have furnished. Correspondence led to personal intimacy, and Sir John visited Mr. Gostling at Canterbury in 1772 and the following year. He also, in 1772, resided a considerable time in Oxford, making extracts from MSS. in the Bodleian and other libraries, and accompanied by an artist from London to copy the portraits in the Music School.

In 1776 he published, in 5 vols. 4to, his 'History of Music,' a work upon which he had been engaged for the space of sixteen years. Three years before, he had obtained permission to dedicate his book to George III.; and he now presented it to his Majesty at Buckingham House, during a long audience granted for the purpose. The King, no doubt, appreciated the work as it deserved, and the University of Oxford showed their estimation of it by offering to confer on the author the degree of Doctor in Law, which he had reasons for declining; but that learned body paid him the compliment of requesting his portrait, which now hangs in the Music School.

In this delightful book, authorities have been consulted and brought together from various libraries and museums, with a diligence in research, and a solicitude almost affectionate in their collection and arrangement, forming together a mass of the most curious and entertaining

information upon a subject the most enchanting. No pains have been spared to render the work complete. It bears evidence of being a labour of love; of being one of those tasks, which are none to the compiler,—but a delight. The evident pleasure he takes in his work, reflects itself upon the reader; rendering it light and agreeable,—nothing wearisome, however long and minute. There is evidence of toil, but the perusal is not toilsome; for the author's toil is so willingly undertaken, and so enjoyingly pursued, that the effect upon the reader is unalloyed enjoyment. No amount of care has been deemed too much; and the reader feels grateful for being spared the trouble of seeking, while he luxuriously profits by the result. He sits in his arm-chair, comfortably ruminating the stores of knowledge which have been culled for him from various wide-spread sources, by patient, worthy Sir John; who,—the beauty of it is,—has evidently had as much gratification in gathering the materials for the feast, as the reader finds from the feast itself. Besides the information contained in the book, there is abundance of amusing reading. It was a favorite with Charles Lamb, who, though no musical authority, was an eminent literary one, of unsurpassed refined taste and high judgment. In the shape of notes, there is a fund of anecdote, and a large amount of incidental miscellaneous matter, scattered through the work, that pleasantly relieve the graver main theme. Anything entertaining, that can by possibility be linked on to the subject of music, is easily and chatfully introduced; as though the author and his reader were indulging in a cheerful gossip by the way. We have, in quaint succession, such things as that romantic love-passage of Giuffredo Rudello, the troubadour poet; or that wondrous account of the Moorish Admirable Crichton, Alpharabius,—which is like a page out of the 'Arabian Nights;' or that naïve detail of bluff King Harry's fancy for my Lord Cardinal's minstrels, and of his setting off with them for a certain nobleman's house where was a shrine to which he had vowed a pilgrimage, and where he spent the night in dancing to the sound of the minstrels' playing.

Sir John had no prototype of his great work. The design, as the execution, was entirely his own; and when the large extent, and various nature of his materials are considered, the plan will be allowed to have been devised with considerable ability.

It is not an unusual, and at first sight appears not an unreasonable prejudice, to suppose that, in order to qualify a man to write upon any art, he should be a professor of, or at least have been regularly educated to, the art of which he treats. A lawyer seems as little qualified to write a history of Music, as a composer would be to expound the nature of Uses and Trusts, or a violin player to explain the principles of Architectural beauty. To write on the practical department of an art certainly requires experience and information which an artist alone can acquire; and had Sir John Hawkins published a new book of instructions for the organ or violoncello, he would probably have subjected himself to being deservedly ac-

* This collection, when his History of Music was published, Sir John gave to the British Museum, and thus preserved it from the fate which attended the rest of his library.

† The Rev. William Gostling, Minor Canon of Canterbury Cathedral, was the son of that Mr. Gostling for whom Purcell wrote his celebrated anthem, 'They that go down to the sea in ships,' and of whom Charles II. said, 'You may talk of your nightingales and sky-larks, but I have a Gostling shall beat them all.' Combining his own knowledge to the information derived from his father, Mr. Gostling was a living depository of musical history and anecdote back nearly to the middle of the seventeenth century.

rising—and the more it is read and known, the more it will rise in public estimation and demand.

It may not, however, be generally known that Burney's *History*, which was more successful at the time, was not begun till many years after this, nor till its author had been allowed constant and unrestrained access to the materials collected by Sir John for his work. Moreover, the first volume only of Burney's *History* was published simultaneously with Sir John's complete work, while the remaining three followed at intervals of two years between each volume.

The unfair competition, all things considered, of Dr. Burney, and the prejudices it engendered, rendered it scarcely surprising that Sir John's *History of Music* did not even furnish a pair of carriage horses to its author; who had often declared that if, in a pecuniary point of view, he obtained that trifling reward of his sixteen years' labour he should be well satisfied.

Which of the rival histories is intrinsically the better, and consequently the more calculated to secure an enduring meed of approbation, has been carefully considered; and the result is, the re-production of Sir John Hawkins's valuable work. The great progress which has been made in the art since that period, as well as the consequent increase in the number of accomplished musicians, formed the turning-point in favor of this decision.

When it is considered that the science of Music is one that has pervaded all time, and been to a greater or less extent the common property of all nations, it is evident that one who could hope to succeed in recording its history, must bring to his undertaking a competent knowledge of both ancient and modern languages; an acquaintance with history critically exact with regard to its periods and their peculiarities; and a familiarity with blackletter and obsolete signs and abbreviations, sufficient to discover and decipher any documents relating to the art which might be recorded in them. To this were to be added a careful assiduity—which, unscared by its details, and undeterred by its intricacies, should follow the art in its progress through centuries extending from Jubal down to Handel;—a laborious zeal, which might know neither fatigue nor rest, in investigating not only the properties of the science itself, but likewise all circumstances respecting the subject which might in any way, however remotely, relate to it;—a keen, discriminating action, which should unhesitatingly and accurately determine authenticities and affix dates;—and, finally, a judicious method, which should first arrange and systematize the knowledge acquired, and then present it in the clearest form to the contemplation of the world. Sir John Hawkins united in himself most of these qualities in an eminent degree.

In the month of December, 1783, Dr. Johnson, with whom he had for many years been on terms of great friendship, sent for him, and imparting to him that he had discovered in himself symptoms of dropsy, declared his desire of making a will, and his wish that Sir John should be one of his executors. On his consenting, the

Doctor entered into an account of his circumstances, and mentioned the disposition he intended to make of his effects. Of this matter Boswell has thought fit to say 'that by assiduous attendance upon Johnson in his last illness, he (Hawkins) obtained the post of one of his executors.'

Now the impression created by this statement on the mind of a person not acquainted with the facts would be, firstly, that up to the period mentioned, the acquaintance between the Doctor and Sir John had been slight, and secondly, that the attention paid by the latter to his dying friend proceeded from an unworthy motive. With regard, then, to the former portion of the insinuation, it may be sufficient to state that the acquaintance between them had subsisted for more than thirty years, and that up to a comparatively recent period, there were those living who had been in the habit of frequently meeting Johnson at Hawkins's house, and who could testify to the closeness of their intimacy. To the latter, we have the whole tenor of Sir John's life to oppose; and it is not very probable that he, who from a scruple which the world may consider overstrained, but must admit to be honorable, had used, and successfully used, all his energies to dissuade another who was bent on enriching him, from carrying his intentions into effect; who had, from a spirit of independence, twice declined a seat in Parliament, then a much greater object of ambition than now; and who, as a matter of conscience, had preferred defraying the expense of his sons' education at one public school to accepting a free presentation for them to another;—it is not likely, we say, that the man who had acted in this way, would stoop to the moral degradation imputed to him. To these general facts, indeed, his vindication might well be left; but there are others of a more particular nature. In the first place, then, the conversation in which Dr. Johnson engaged Sir John to be his executor, took place in December, 1783; and about the middle of 1784 he was 'so well recovered from all his ailments' that 'both himself and his friends hoped that he had some years to live.' Thus it appears that, far from the appointment being the effect of anything that occurred in his last illness, it in fact, preceded it; for although the will was not executed till December, 1784, all the arrangements had been made the year before. In the second place, it is established by the testimony of one of Sir John's sons, that Johnson had for many years been accustomed to consult him on all important matters, and more especially those connected with business; and in the third, it can be stated on the same authority, that 'the office had been wholly unsolicited by words or actions.'

To take, however, Boswell's assertion as it stands—if it really be the case that Johnson was moved to select Sir John as he describes, it argues a weakness on the great Doctor's part which Boswell, as his friend, would have done well to conceal; a weakness, by the way, the supposition of which is far from being borne out by his choice of the co-executors, Dr. William Scott (afterwards

Lord Stowell) and Sir Joshua Reynolds. If it be not so, and Johnson, in the full enjoyment of his usual strength of mind, deliberately preferred Hawkins to Boswell, [and *hinc illæ lacrymæ*] the inference is obvious that he selected the person in whom he had the greatest confidence. Neither is Boswell's assertion correct, that in consequence of his appointment as an executor, the booksellers of London employed him to publish an edition of Johnson's works and to write his life. The fact is, that a number of slanders and calumnies had been propagated against Johnson during his life, and he was apprehensive that many more would be circulated after his decease. With this impression on his mind, he frequently, in the many interviews which took place between the friends during the last year of his life, committed in *express terms*, 'the care of his fame' to Sir John. It was, therefore, to this injunction, and not to a contract with the booksellers, that the life of Johnson and edition of his works, published by Hawkins in 1787, owed its existence.

He had scarce entered upon his task when his own library, that dearest pride and most cherished worldly good of a literary man—a labour which it had been the toil and delight of more than thirty years to collect, and which comprised among its books, prints and drawings, many articles that no money could replace—was destroyed by fire, at the time his house in Queen Square, Westminster, was burnt down. The blow was a severe one, but the sufferer was never heard to murmur or complain, and as soon as he was settled in another habitation, he sought in renewed study the solace of his misfortune.

In 1787 he closed his literary career, by publishing his life of Johnson and edition of his works. Immediately on its appearance, it was virulently attacked by Boswell and others; but the author was repeatedly accosted in the streets by utter strangers, who thanked him for the amusement and information he afforded them. No one can doubt that there existed, at the time of its publication, many causes, totally irrespective of the merits of the book, which may account for its being so violently decried. In the first place, he who undertakes to give to the world accounts of his contemporaries invariably runs the risk of incurring great animosity: and the more candidly and impartially he performs his task, the greater is his danger in this respect; for while the friends of the deceased consider that his virtues and amiable qualities are not sufficiently enlarged upon, those who disliked him, on the other hand, determine that his failings have been too much glossed over. This was eminently the case with Johnson: there can be no question that his strong sense, his wonderful acquirements, and his gigantic intellect, had excited the unbounded admiration and secured the enduring love of many; but it is equally certain that his dictatorial spirit and his boorish manner, under which some had personally smarted, had created him enemies in an equal proportion. With Hawkins's work, then, both parties were dissatisfied—the one, that the representation given of him fell so far short of their

extravagant idea of his perfection, the other that it exceeded what they considered his deserts. Again, there were, no doubt, others who had pleased their imaginations with the hope, that the slight acquaintance they might have with Johnson, would induce the writer of his life to hand them down to posterity as the friends of the great Lexicographer, and who, having travelled through the biography without attaining the 'wished-for consummation' of seeing their 'names in print,' were not inclined to view with very favorable eyes the labours of his historian. Another, and the not least bitter class, was composed of those who, sufficiently aware of the extent of Johnson's reputation, had conceived the design of profiting by his celebrity. Of these projected biographers the number was not small, and it cannot be supposed that they could be other than hostile to a work which, by superseding the necessity for a second, defeated their hope of fame or emolument, whichever might be their object.

Before concluding this narration, it may be allowable to remark, that while few persons have been, both during life and after death, so rancorously attacked as Sir John Hawkins, none have come out of an ordeal so severe as that to which his reputation has been exposed, more thoroughly unscathed than he has done. Some of the most probable causes of his being so virulently assailed, have been stated above: but there are doubtless others; and the one which drew upon him the enmity of Stevens is too important to be omitted. It appears that an inexplicable coolness had arisen between Garrick and Hawkins, who had formerly been on very intimate terms, and on some accidental circumstances leading the latter to investigate the source of this, it was discovered, on irrefragable evidence, that Stevens had made mischief between the two. With this he was taxed by Sir John; and unable, to refute the impeachment, was by him ejected from his house. This, Stevens was not likely to forgive; more especially as he must have been conscious that he had been detected in another act of most disgraceful nature. A day or two before the intended presentation of the address of 1775, mentioned above, he had called on Sir John. A manuscript copy of the address lay on the table in the room into which he was shown. This after his departure was missed and was never found again. On the publication of the *St. James's Chronicle*, the paper with which Stevens was connected, a copy of the missing address was found inserted, with an account of its presentation. Now it so happened that, owing to some accident, the reception of the address by the king had been postponed, and that at the time the public were reading this account, the address had not yet been presented at all. The address too, only existed in manuscript, and in Sir John's possession: under these circumstances there can be no doubt that Stevens had purloined the copy, trusting that the address would be presented at the time proposed, which was anterior to the publication of his paper, and that on its appearance in the *St. James's Chronicle*, it would be supposed that he had received it from some person about the Court. The accidental delay had however defeated this hy-

pothesis; and, with the other circumstances, fixed the guilt of the theft upon him.

As another instance of Mr. Stevens's mode of procedure, the following is subjoined:—

9, Bridge-street, Westminster, April 3, 1853.

MY DEAR SIR,—I enclose you the anecdote which I promised. Any information in relation to your edition of Hawkins that I am able to afford, shall be cheerfully contributed in aid of so spirited and useful a publication.

Most truly yours, W. AYRTON.

To Mr. J. Alfred Novello.

Hawkins's History and George Stevens.

"When Hawkins's *History of Music* was ready for printing, Stevens—who contributed to it much of the literary portion—that is, the literary facts and the result of his research—went to Thomas Payne ('Old, honest Tom Payne, of the Mews-gate'), and strongly recommended him to purchase the work, at the price of 500 guineas, extolling it as exhibiting great learning, and abounding in interesting detail.

"The week after the work appeared, a letter was published in the *St. James's Evening Post*, attacking it with great violence. Stevens, in Payne's shop, entered on the subject of the letter, condemning in strong terms the injustice and violence of the critique. Shortly after, a second attack appeared in the same journal, and Stevens, at his usual—almost daily—visit to the Mews-gate, where many of the literati used to assemble and converse, again expressed his surprise and disgust at the continuance of such wanton hostility, saying, 'It is a most unfair and most malignant enemy who writes in the *St. James's Evening Post*.' 'Yes,' said Mr. Payne, 'it is most malignant and unjust; and I have the best proofs, Mr. Stevens, that you are the author of those letters, and I never wish to see your face again in this place!'

"Stevens never after repeated his visits; but wishing to meet, as usual, his friend, the Rev. Mr. Cracherode, used to walk on the side opposite Payne's shop at the time when Cracherode generally called there, in order to enjoy his almost daily literary chat with him.*

"The foregoing I had from Mr. Thomas Payne, who succeeded his father in the business, which he removed to Pall Mall. The account was given to me, in nearly the same words, by Mr. Evans, bookseller in Pall Mall, who had been a shopman of the elder Payne; and this has been confirmed by Mr. Henry Foss, who, on the death of the second T. Payne, carried on the business, in partnership with Mr. John Thomas Payne, in Pall Mall.

"I have a clear recollection of Sir J. Hawkins, who was a constant *dropper-in* at my father's house, James-street, Buckingham-gate. He was generally thought somewhat austere; but to me, as a child, he was gentle and kind. After the destruction, by fire, of his house in Queen-square, Westminster, and of his curious library, he resided in the Broad Sanctuary, close to the Abbey; which house was recently pulled down, to make way for the improvements in that quarter.

"W. A."

* Mr. Cracherode (qy. Dr. P.) lived at No. 24, Queen-square, Westminster, and at Clapham; was a man of large fortune, and possessed one of the finest libraries then existing, which, at his death, was purchased by the British Museum, for £14,000.

All this was surely sufficient to make Stevens rejoice in the opportunity of assailing Hawkins, and to induce him to use any means to injure one who had such just reason to regard him with contempt.

Where Boswell and Stevens led, others have been found to follow; but it may be remarked that their assaults consist more of violent expressions of opinion, than of records of facts calculated to affect his personal or literary fame.

The terms of friendship, indeed, on which he stood with those who were the best men of the day, both as regards high character and literary attainment, form the surest criterion of the estimation in which he was held by those persons whose good opinion was most to be valued.

Sir John Hawkins had always been a pious man: as advancing years brought him nearer and nearer to the event which no care can avoid, he became more and more attentive to the duties of religion, and to devotional and theological studies, to which he latterly dedicated every hour which some imperative duty did not claim.

On the morning of the 14th of May, 1789, he was attacked, while away from home, by a paralytic affection: he immediately returned and was carried up to bed, but rallied so far in the course of the day as to get up again to receive an old friend who had promised to visit him in the evening: he was however again seized, and was compelled to return to his bed from which he never again rose, for his malady becoming aggravated by apoplectic symptoms, put a period to his life on the 21st of May, just one week from the date of his first attack.

He left behind him—to use the words of Chalmers—'A high reputation for abilities and integrity, united with the well-earned character of an active and resolute magistrate, an affectionate husband and father, a firm and zealous friend, a loyal subject, and a sincere Christian, and rich in the friendship and esteem of very many of the first characters for rank, worth, and abilities, of the age in which he lived.'

He was buried in the cloisters of Westminster Abbey, in the North Walk, under a stone which, by his express direction, bears no more than the following inscription:—

J. H.

OBITU XXI MAII, MDCCCLXXXIX,

Ætatis LXX.

His wife, who survived him four years, is buried in the same grave.

He left two sons, John Sidney and Henry, and one daughter, Letitia Matilda; all, but especially the latter, well known in the literary world. Miss Hawkins's novels evince talent; while the cause of virtue, usefulness, and right feeling has never found a more zealous, and but seldom, very seldom, a more efficient advocate.

By this summary of the circumstances which marked Sir John Hawkins's life, one of the great ends of Biography is achieved: serving to stimulate men by a worthy example; and showing, that, however contemporaneous meanness, envy, or detraction, may cause full

justice to be delayed, it cannot prevent eventual honor from accruing to one who steadfastly maintains his virtuous integrity. It supplies a pregnant instance of the unfailing comfort of conscious rectitude, beneath unfounded aspersions and venomous assault. It inspires a consoling reliance upon ultimate equitable estimate, however long deferred. It furnishes a sustaining monition, that patient desert, whatever may be the amount of injurious misapprehension it chances temporarily to encounter, is sure in the end to triumph, and to secure to itself a genuine though tardily-yielded acknowledgment. The paltry malice, and base tricks, of such men as Boswell and Stevens, in their endeavour to degrade an honorable gentleman in the eyes of the world,—to obtain an undervaluing and false opinion of him,—and to procure the failure of his productions, would not have been recorded here; were it not that there are times when such candour of revelation is absolutely needful. No

occasion could be more fitting than this, when relating Sir John's biography, and re-printing his great work. Not only was it requisite in justification,—to rescue a worthy, honest name from unmerited imputation, and to reclaim his literary efforts from unfair slight; but it was proper, in order to show how uniformly the machinations of such insidious maligners, after a period of apparent success in prevailing against the object of their attack, are sure to recoil upon their devisers' own heads, when the verdict of the world shall at last adjudge the cause, in a clearer knowledge of the truth.

Posterity awards honoring repute and distinction to Sir John Hawkins, as an excellent upright man, in his private character; and testifies value for his literary capacity, by giving the palm to his admirable History over the one which claims to be its rival,—a fact proved from the present demand for this re-print of the work here offered to the Public.

ANNOUNCEMENT.

IN the present age, when public attention is so extensively directed towards the study and practice of Music, it has been thought that a new edition of Sir John Hawkins's valuable History of the Science and Practice of Music would prove peculiarly acceptable, as being by far the best history of the Art extant.

The whole of the original Text has been printed in its integrity, together with the Illustrations of Instruments (for which more than 200 Woodcuts have been engraved), the Musical Examples, and the Fac-similes of Old Manuscripts.

The form adopted, super-royal 8vo., has the advantage of bringing much more matter under the eye at one view, and in point of economy the 2722 pages of the Quarto are comprised in 1016 pages. The paging has been continued from the beginning to the end, as more simple for reference, and to enable those who like such information in one volume, to bind it in that form; but provision has been made, by adding a second title after page 486, to divide the work into two volumes, an arrangement which may generally be preferable.

The Medallion Portraits of Musical Composers, which were in the Quarto edition, have been printed in a separate volume; these may be purchased optionally, and thus decrease the price of the History to those with whom economy must be a consideration. They consist of upwards of sixty portraits, printed from the original copperplates engraved for the 1776 edition; to which has been added a portrait of Sir John Hawkins himself from the painting in the Oxford Music School, through the courtesy of the surviving members of his family. All the additional manuscript notes which adorn the Author's own copy left to the British Museum, are inserted (by permission of the authorities) in the edition now presented to the public: it may therefore be considered what a new edition edited by Sir John Hawkins himself would have

been; the additions in text or notes are distinguished by being printed in italics.

To ensure the careful reproduction of matter of such varied character, the assistance of many correctors has been secured. The general correction of the press was confided to Mrs. Cowden Clarke, but the pages also passed under the eye of the musician, the mathematician, and the classical linguist. In these departments, various portions have had the care of Mr. Edward Holmes, Mr. Josiah Pittman, Mr. W. H. Monk, and Mr. Burford G. H. Gibsons, with occasional suggestions from other well-wishers; and the whole work, such advantage as might be derived from the Publisher's printing experience.

There has been added a Memoir of the Author, compiled from original sources, which will be read with interest; but it is anticipated that the most valuable addition to the book will be found in the carefully-made general and other Indexes. The large subject of a History of Music, embracing heterogeneous matter and the result of wide research, makes it a storehouse to which a definite clue is required in giving ready access. The Indexes have been going on contemporaneously with the printing of the book; and Mrs. Cowden Clarke's experience derived from her Concordance to Shakespeare, fitted her especially for the task of their compilation. A table of parallel books, chapters, and pages has been added, to render the new Indexes available for those who possess the Quarto edition.

In concluding these brief but necessary words of explanation, the warmest thanks are offered to the editorial friends above specified, as also to those kind supporters who have subscribed for the work during its periodical issue by the Public's, and their obedient servant,

THE PUBLISHER.

69, Dean Street, Soho, London.
August, 1853.

AUTHOR'S DEDICATION AND PREFACE.

TO GEORGE THE THIRD, King of Great Britain, &c., a Prince not more distinguished by his patronage of those elegant arts which exalt humanity and administer to the imaginative faculties the purest delights, than honoured and beloved for his regal and private virtues, the following History is, with all due reverence and gratitude, dedicated by him who esteems it equally an honour and a felicity to subscribe himself His Majesty's faithful and devoted subject and servant, THE AUTHOR.

A HISTORY OF MUSIC by any but a professor of the science, may possibly be looked on as a bold undertaking; and it may appear not a little strange that one, who is perhaps better known to the world as occupying a public station than as a writer, should choose to be the author of a work of this kind, and for which the course of his studies can hardly be supposed to have in any degree qualified him.

In justification of the attempt, and to account for this seeming inconsistency, the reader is to know, that the author having entertained an early love of music, and having in his more advanced age not only become sensible of its worth, but arrived at a full conviction that it was intended by the Almighty for the delight and edification of his rational creatures, had formed a design of some such work as this many years ago, but saw reason to defer the execution thereof to a future period.

About the year 1759, he found himself in a situation that left his employments, his studies, and his amusements in a great measure to his own choice; and having in a course of years been as industrious in making collections for the purpose as could well consist with the exercise of a laborious profession, he, with a copious fund of materials, began the work: but before any considerable progress could be made therein, he was interrupted by a call to preside in the magistracy of the county of his residence, which, though unsolicited on his part, he could not decline without betraying an indifference to the interests of society, and the preservation of public order, or such an aversion to the occupations of an active life, as in few cases is excusable, and in many reproachful.

Determining, however, to avail himself of those intervals of leisure which the stated recesses from the exercise of his office afforded, and which seemed too precious to be wasted either in sloth and indolence, or those fashionable recreations and amusements, to which he was ever disposed to prefer the pursuit of literature, he re-assumed his work; and with the blessing of health, scarcely interrupted for a series of years, has been able to present it to the world in the condition in which it now comes forth.

What the reader is to expect from it, and as the fruit of many years study and labour, is the history of a science deservedly ranked among those, which, in contradistinction to the manual arts, and others of lower importance, have long been dignified with the characteristic of liberal; and as the utility of Music is presupposed in the very attempt to trace its progress, an enumeration of its various excellencies will scarcely be thought necessary; the rather perhaps as its praises, and the power it exercises over the human mind, have been celebrated by the ablest paegegyrists.

Farther than the circumstances attending the peculiar situation of the author and the work may be allowed to entitle him to it, the favour or indulgence, or whatever else it is the practice of writers to crave of the public, is not here sued for, either on the ground of want of leisure, inadvertence, or other pretences; for this reason, that there can be no valid excuse for a publication wittingly imperfect; and it is but a sorry compliment that an author makes to his reader, when he tenders him a work less worthy regard than it was in his power to make it.

To be short, the ensuing volumes are the produce of sixteen years labour, and are compiled from materials which were not collected in double that time. The motives to the undertaking were genuine, and the prosecution of it has been as animated as the love of the art, and a total blindness to lucrative views, could render it. And perhaps the best excuse the author can make for the defects and errors that may be found to have escaped him, must be drawn from the novelty of his subject, the variety of his matter, and the necessity he was under of marking out himself the road which he was to travel.

It may perhaps be objected that music is a mere recreation, and an amusement for vacant hours, conducing but little to the benefit of mankind, and therefore to be numbered among those vanities which it is wisdom to condemn. To this it may be answered, that, as a source of intellectual pleasure, music has greatly the advantage of most other recreations; and as to the other branch of the objection, let it be remembered that all our desires, all our pursuits, our occupations, and enjoyments are vain. What are stately palaces, beautiful and extensive gardens, costly furniture, sculptures, and pictures, but vanities? and yet there are few men so vain as that they had rather be without than possess them. Nay if these be denied us, where are we to seek for amusements,—for relief from the cares, the anxieties and troubles of life; how support ourselves in solitude, or under the pressure of affliction; or how preserve that equanimity, which is necessary to keep us in good humour with ourselves and mankind? As to the abuses of this excellent gift, enough it is presumed is said in the ensuing work by way of caution against them, and even to demonstrate that as there is no science or faculty whatever that more improves the tempers of men, rendering them grave, discreet, mild, and placid, so is there none that affords greater scope for folly, impertinence, and affectation.

The end proposed in this undertaking is the investigation of the principles, and a deduction of the progress of a science, which, though intimately connected with civil life, has scarce ever been so well understood by the generality, as to be thought a fit subject, not to say of criticism, but of sober discussion: instead of exercising the powers of reason, it has in general engaged only that faculty of the mind, which,

for want of a better word to express it by, we call Taste; and which alone, and without some principle to direct and controul it, must ever be deemed a capricious arbiter. Another end of this work is the settling music upon somewhat like a footing of equality with those, which, for other reasons than that, like music, they contribute to the delight of mankind, are termed the sister arts; to reprobate the vulgar notion that its ultimate end is merely to excite mirth; and, above all, to demonstrate that its principles are founded in certain general and universal laws, into which all that we discover in the material world, of harmony, symmetry, proportion, and order, seems to be resolvable.

The method pursued for these purposes will be found to consist in an explanation of fundamental doctrines, and a narration of important events and historical facts, in a chronological series, with such occasional remarks and evidences, as might serve to illustrate the one and authenticate the other. With these are intermixed a variety of musical compositions, tending as well to exemplify that diversity of style which is common both to music and speech or written language, as to manifest the gradual improvements in the art of combining musical sounds. The materials which have furnished this intelligence must necessarily be supposed to be very miscellaneous in their nature, and abundant in quantity: to speak alone of the treatises for the purpose, the author may with no less propriety than truth assert, that the selection of them was an exercise of deep skill, the result of much erudition, and the effect of great labour, as having been for a great part of his life the employment of that excellent theorist in the science, Dr. Pepusch. These have been accumulating and increasing for a series of years past: for others of a different kind, recourse has been had to the Bodleian library and the college libraries in both universities; to that in the music-school at Oxford; to the British Museum, and to the public libraries and repositories of records and public papers in London and Westminster; and, for the purpose of ascertaining facts by dates, to cemeteries and other places of sepulture; and to him that shall object that these sources are inadequate to the end of such an undertaking as this, it may be answered, that he knows not the riches of this country.

A correspondence with learned foreigners, and such communications from abroad as suit with the liberal sentiments and disposition of the present age, together with a great variety of oral intelligence respecting persons and facts yet remembered, have contributed in some degree to the melioration of the work, and to justify the title it bears of a General History; which yet it may be thought would have been more properly its due, had the plan of the work been more extensive, and comprehended the state of music in countries where the approaches to refinement have yet been but small.

It must be confessed that in some instances, particularly in the discussion of the first principles of morality, and the origin of human manners, the researches of learned men have been extended to nations, or tribes of people, among whom the simple dictates of nature seemed to be the only rule of action; but the subjects here treated of are science, and the scientific practice of music: now the best music of barbarians is said to be hideous and antonishing sounds.* Of what importance then can it be to enquire into a practice that has not its foundation in science or system, or to know what are the sounds that most delight a Hottentot, a wild American, or even a more refined Chinese?

For the style, it will be found to be uniformly narratory; as little encumbered with technical terms, and as free from didactic forms of speech, as could consist with the design of explaining doctrines and systems; and it may also be said that care has been taken not to degrade the work by the use of fantastical phrases and modes of expression, that, comparatively speaking, were invented yesterday, and will die to-morrow; these make no part of any language, they conduce nothing to information, and are in truth nonsense sublimated.

For the insertions of biographical memoirs and characters of eminent musicians, it may be given as a reason, that, having benefited mankind by their studies, it is but just that their memories should live: Cicero, after Demosthenes, says that "*bona fama propria possessio defunctorum*;" and for bestowing it on men of this faculty, we have the authority of that scripture which exhorts us to praise "such as found out musical tunes, and rected verses in writing."† Besides which it may be observed, that in various instances the lives of the professors of arts are in some sort a history of the arts themselves. For digressions from his subject, the insertion of anecdotes that have but a remote relation to it, or that describe ancient modes or customs of living, the author has less to say; these must be left to the judgment of his readers, who cannot be supposed to be unanimous in their opinions about them.

It remains now that due acknowledgment be made of the assistance with which the author has been favoured and honoured in the course of his work; but as this cannot be done without an enumeration of names, for which he has obtained no permission, he is necessitated to declare his sense of the obligation in general terms, with this exception, that having need of assistance in the correction of the music plates, he was in sundry instances eased of that trouble by the kind offices of one, who is both an honour to his profession and his country, Dr. William Boyce; and of the difficulty of deciphering, as it were, and rendering in modern characters the compositions of greatest antiquity amongst those which he found it necessary to insert, by the learning and ingenuity of Dr. Cooke, of Westminster Abbey, Mr. Marmaduke Overend, organist of Islworth in Middlesex, and Mr. John Stafford Smith, of the royal chapel.

* Characteristics, vol. I. page 242. † Ecclesiasticus, chap. xlii. verse 5.

Hatton Garden,
26th Aug., 1776.

PRELIMINARY DISCOURSE.

THE powers of the imagination, with great appearance of reason, are said to hold a middle place between the organs of bodily sense and the faculties of moral perception; the subjects on which they are severally exercised are common to the senses of seeing and hearing, the office of which is simply perception; all pleasure thence arising being referred to the imagination.

The arts which administer to the imaginative faculty the greatest delight, are confessedly poetry, painting, and music; the two former exhibiting to the mind by their respective media, either natural or artificial,* the resemblances of whatever in the works of nature is comprehended under the general division of great, new, and beautiful; the latter as operating upon the mind by the power of that harmony which results from the concord of sounds, and exciting in the mind those ideas which correspond with our tenderest and most delightful affections.

These, it must be observed, constitute one source of pleasure; but each of the above arts may in a different degree be said to afford another, namely, that which consists in a comparison of the images by them severally and occasionally excited in the mind, with their archetypes; thus, for instance, in poetry, in comparing a description with the thing described; in painting, a landscape and the scene represented by it, or a portrait and its original; and in music, where imitation is intended, as in the songs of birds, or in the expression of those various inflexions of the voice which accompany passion or exclamation, weeping, laughing, and other of the human affections, the sound and the thing signified.

It is easy to discover that the pleasures above described are of two distinct kinds,—the one original and absolute, the other relative; for the one we can give no reason other than the will of God, who in the formation of the universe and the organization of our bodies, has established such a relation as is discoverable between man and his works; the other is to be accounted for by that love of truth which is implanted in the human mind.† In poetry and painting therefore we speak, and with propriety, of absolute and relative beauty; as also of music merely imitative; for as to harmony, it is evident that

* The natural media seem to consist only in colour and figure, and refer solely to painting: the artificial are words, which are symbols by compact of ideas, as are also, in a limited sense, musical sounds, including in the term the accident of time or duration.

† In this sentiment liberty has been taken to differ from Mr. Harris, who with his usual accuracy, has analysed this principle of the human mind in the following note on a passage in the second of his *Three celebrated Treatises*:—

‘That there is an eminent delight in this very recognition itself, abstract from any thing pleasing in the subject recognised, is evident from hence—that, in all the mimetic arts, we can be highly charmed with imitations, at whose originals in nature we are shocked and terrified. Such, for instance, as dead bodies, wild beasts, and the like.’

‘The cause assigned for this, seems to be of the following kind: we have a joy, not only in the sanity and perfection, but also in the just and natural energies of our several limbs and faculties. And hence, among others, the joy in reasoning, as being the energy of that principal faculty, our intellect or understanding. This joy extends, not only to the wise, but to the multitude. For all men have an aversion to ignorance and error; and in some degree, however moderate, are glad to learn and to inform themselves.’

‘Hence therefore the delight arising from these imitations; as we are enabled in each of them to exercise the reasoning faculty; and, by comparing the copy with the archetype in our minds, to infer that this is such a thing, and that another; a fact remarkable among children, even in their first and earliest days.’

the attribute of relation belongs not to it, as will appear by a comparison of each with the others.‡

With regard to poetry, it may be said to resemble painting in many respects, as in the description of external objects, and the works of nature; and so far it must be considered as an imitative art; but its greatest excellence seems to be its power of exhibiting the internal constitution of man, and of making us acquainted with characters, manners, and sentiments, and working upon the passions of terror, pity, and various others. Painting is professedly an imitative art; for, setting aside the harmony of colouring, and the delineation of beautiful forms, the pleasure we receive from it, great as it is, consists in the truth of the representation.

But in music there is little beyond itself to which we need, or indeed can, refer to heighten its charms. If we investigate the principles of harmony, we learn that they are general and universal; and of harmony itself, that the proportions in which it consists are to be found in those material forms, which are beheld with the greatest pleasure, the sphere, the cube, and the cone, for instance, and constitute what we call symmetry, beauty, and regularity; but the imagination receives no additional delight; our reason is exercised in the operation, and that faculty alone is thereby gratified. In short, there are few things in nature which music is capable of imitating, and those are of a kind so uninteresting, that we may venture to pronounce, that as its principles are founded in geometrical truth, and seem to result from some general and universal law of nature, so its excellence is intrinsic, absolute, and inherent, and, in short, resolvable only into His will, who has ordered all things in number, weight, and measure.§

Seeing therefore that music has its foundation in nature,

‡ Nevertheless there have not been wanting those, who, not contemplating the intrinsic excellence of harmony, have resolved the efficacy of music into the power of imitation; and to gratify such, subjects have been introduced into practice, that to injudicious ears have afforded no small delight; such, for instance, as the noise of thunder, the roaring of the winds, the shouts and acclamations of multitudes, the wallings of grief and anguish in the human mind; the song of the cuckoo, the whooting of the screech-owl, the cackling of the hen, the notes of singing-birds, not excepting those of the lark and nightingale. Attempts also have been made to imitate motion by musical sounds; and some have undertaken in like manner to relate histories, and to describe the various seasons of the year. Thus, for example, Froberger, organist to the emperor Ferdinand III. is said to have in an allemande represented the passage of Count Thurn over the Rhine, and the danger he and his army were in, by twenty-six cataracts or falls in notes. See page 627. Kuhnau, another celebrated musician, composed six sonatas, entitled *Biblisches Historien*, wherein, as it is said, is a lively representation in musical notes of David manfully combating Goliath. Page 663, in note. Buxtehude of Lubeck also composed suites of lessons for the harpsichord, representing the nature of the planets. Page 851. Vivaldi, in two books of concertos has striven to describe the four seasons of the year. Page 837. Geminiani has translated a whole episode of Tasso's *Jerusalem* into musical notes. Page 916. And Mr. Handel himself, in his *Israel in Egypt*, has undertaken to represent two of the ten plagues of Egypt by notes, intended to imitate the buzzing of flies and the hopping of frogs.

But these powers of imitation, admitting them to exist in all the various instances above enumerated, constitute but a very small part of the excellence of music; wherefore we cannot but applaud that shrewd answer of Agesilaus, king of Sparta, recorded in Plutarch, to one who requested him to hear a man sing that could imitate the nightingale, ‘I have heard the nightingale herself.’ The truth is, that imitation belongs more properly to the arts of poetry and painting than to music; for which reason Mr. Harris has not scrupled to pronounce of musical imitation, that at best it is but an imperfect thing. See his *Discourse on Music, Painting, and Poetry*, page 69.

§ Wisdom, xi. 20.

and that reason recognizes what the sense approves, what wonder is it, that in all ages, and even by the least enlightened of mankind, its efficacy should be acknowledged; or that, as well by those who are capable of reason and reflection, as those who seek for no other gratifications than what are obvious to the senses, it should be considered as a genuine and natural source of delight? The wonder is, that less of that curiosity, which leads men to enquire into the history and progress of arts, and their gradual advances towards perfection, has been exercised in the instance now before us, than in any other of equal importance.

If we take a view of those authors who have written on music, we shall find them comprehended under three classes, consisting of those who have resolved the principles of the science into certain mathematical proportions; of others who have treated it systematically, and with a view to practice; and of a third, who, considering sound as a branch of physics, have from various phenomena explained the manner in which it is generated and communicated to the auditory faculty. But to whom we are indebted for the gradual improvements of the art, at what periods it flourished, what checks and obstructions it has at times met with, who have been its patrons or its enemies, what have been the characteristics of its most eminent professors, few are able to tell. Nor has the knowledge of its precepts been communicated in such a manner as to enable any but such as have devoted themselves to the study of the science to understand them. Hence it is that men of learning have been betrayed into numberless errors respecting music; and when they have presumed to talk about it, have discovered the grossest ignorance. When Strada, in the person of Claudian, recites the fable of the Nightingale and the Lyrist, how does his invention labour to describe the contest, and how does he err in the confusion of the terms melody and harmony; and in giving to music either attributes that belong not to it, or which are its least excellence! and what is his whole poem but a vain attempt to excite ideas for which no correspondent words are to be found in any language? Nor does he, who talks of the genius of the world, of the first beauty, and of universal harmony, symmetry, and order, the sublime author of the Characteristics, discover much knowledge of his subject, when after asserting with the utmost confidence that the ancients were acquainted with parts and symphony, he makes it the test of a good judge in music 'that he understand a fiddle.'*

Sir William Temple speaking of music in his Essay upon the ancient and modern Learning, has betrayed his ignorance of the subject in a comparison of the modern music with the ancient; wherein, notwithstanding that Palestrina, Bird, and Gibbons lived in the same century with himself, and that the writings of Shakespeare and the *Paradise Lost* were then extant, he scruples not to assert that 'the science is wholly lost in the world, and 'that in the room of music and poetry we have nothing 'left but fiddling and rhyming.'

Mr. Dryden, in those two admirable poems, *Alexander's Feast*, and his lesser Ode for St. Cecilia's day, and in his *Elegy on the death of Purcell*, with great judgment gives to the several instruments mentioned by him their proper attributes; and recurring perhaps to the numerous common places in his memory respecting music, has described its effects in adequate terms; but when in the prefaces to his operas he speaks of recitative, of song, and the comparative merit of the Italian, the French, and the English composers, his notions are so vague and indeterminate, as to convince us that he was not master of his subject, and does little else than talk by rote.

* Vide Characteristics, Vol. III., page 263, in note 269.

Mr. Addison, in those singularly humorous papers in the *Spectator*, intended to ridicule the Italian opera, is necessitated to speak of music, but he does it in such terms as plainly indicate that he had no judgment of his own to direct him. In the paper, Numb. 18, the highest encomium he can vouchsafe music is, that it is an agreeable entertainment; and a little after he complains of our fondness for the foreign music, not caring whether it be Italian, French, or High Dutch, by which latter we may suppose the author meant the music of Mynheer Hendel, as he calls him.

In another paper, viz. Numb. 29, the same person delivers these sentiments at large respecting Recitative:— 'However the *Italian* method of acting in *Recitativo* 'might appear at first hearing, I cannot but think it more 'just than that which prevailed in our *English* Opera 'before this innovation; the Transition from an air to 'Recitative Musick being more natural than the passing 'from a Song to plain and ordinary Speaking, which was 'the common Method in *Purcell's* operas.

'The only Fault I find in our present Practice, is the 'making use of the *Italian* *Recitativo* with *English* words.

'To go to the Bottom of this Matter, I must observe that 'the Tone, or, as the *French* call it, the Accent of every 'Nation in their ordinary Speech is altogether different 'from that of every other People, as we may see even in 'the Welsh and Scotch, who border so near upon us. By 'the Tone or Accent I do not mean the Pronunciation of 'each particular Word, but the Sound of the whole Sentence. Thus it is very common for an English gentleman, when he hears a French Tragedy, to complain that 'the Actors all of them speak in a Tone; and therefore he 'very wisely prefers his own countrymen, not considering 'that a Foreigner complains of the same Tone in an 'English Actor.

'For this Reason, the Recitative Music in every Language should be as different as the Tone or Accent of 'each Language; for otherwise what may properly express a Passion in one Language, will not do it in 'another. Every one that has been long in Italy knows 'very well that the Cadences in the Recitativo bear a 'remote Affinity to the Tone of their Voices in ordinary 'Conversation; or, to speak more properly, are only the 'Accents of their Language made more Musical and 'Tuneful.

'Thus the Notes of Interrogation or Admiration in the 'Italian Musick (if one may so call them), which resemble their Accents in Discourse on such Occasions, 'are not unlike the ordinary Tones of an English Voice 'when we are angry; insomuch that I have often seen our 'Audiences extremely mistaken as to what has been 'doing upon the Stage, and expecting to see the Hero 'knock down his Messenger when he has been asking 'him a question; or fancying that he quarrels with his 'Friend when he only bids him Good-morrow.

'For this reason the Italian artists cannot agree with 'our English musicians in admiring *Purcell's* Compositions, and thinking his Tunes so wonderfully adapted 'to his words, because both Nations do not always express the same Passions by the same Sounds.

'I am therefore humbly of opinion that an English 'Composer should not follow the Italian Recitative too 'servilely, but make use of many gentle Deviations from 'it in Compliance with his own Native Language. He 'may copy out of it all the lulling Softness and Dying 'Falls (as Shakespeare calls them), but should still remember that he ought to accommodate himself to an 'English Audience, and by humouring the Tone of our 'Voices in ordinary Conversation, have the same Regard 'to the Accent of his own Language, as those Persons 'had to theirs whom he professes to imitate. It is ob-

'served that several of the singing Birds of our own Country learn to sweeten their Voices, and mellow the Harshness of their natural Notes by practising under those that come from warmer Climates. In the same manner I would allow the Italian Opera to lend our English Musick as much as may grace and soften it, but never entirely to annihilate and destroy it. Let the Infusion be as strong as you please, but still let the Subject Matter of it be English.

'A Composer should fit his Musick to the Genius of the People, and consider that the Delicacy of Hearing and Taste of Harmony has been formed upon those Sounds which every Country abounds with. In short, that musick is of a relative Nature, and what is Harmony to one Ear may be Dissonance to another.'

Whoever reflects on these sentiments must be inclined to question as well the goodness of the author's ear as his knowledge of subject. The principle on which his reasoning is founded, is clearly that the powers of music are local; deriving their efficacy from habit, custom, and whatever else we are to understand by the genius of a people; a position as repugnant to reason and experience as that which concludes his disquisition, viz., that 'what is harmony to one ear may be dissonance to another'; whence as a corollary it must necessarily follow, that the same harmony or the same succession of sounds may produce different effects on different persons; and that one may be excited to mirth by an air that has drawn tears from another.

A late writer, in a strain of criticism not less erroneous than affectedly refined, forgetting the energy of harmony, independent of the adventitious circumstances of loudness or softness that accompany the utterance of it; or perhaps not knowing that certain modulations or combinations of sounds have a necessary tendency to inspire grand and sublime sentiments, such, for instance, as we hear in the Exaltabo of Palestrina, the Hosanna of Gibbons, the opening of the first concerto of Corelli, and many of Mr. Handel's anthems, ascribes to the *bursts*, as he calls them, of Boranello,* and the symphonies of Yeomelli† the power of dilating, agitating, and rousing the soul like the paintings of Timomachus and Aristides,‡ whose works by the way no man living ever saw, and of whose very names we should be ignorant, did they not occur, the one in Pliny, the other in some of the epigrams in the Greek Anthologia.

In a manner widely different do those poets and philosophers treat music, who, being susceptible of its charms, and considering it as worthy the most abstract speculation, have made themselves acquainted with its principles. Milton, whenever he speaks of the subject, and there are many passages in the *Paradise Lost* and his other poems where he has taken occasion to introduce it, besides expressing an enthusiastic fondness for music, talks the language of a master.

His ideas of the joint efficacy of music and poetry, and of the nature of harmony, are manifested in the following well-known passage:—

And ever against eating cares
Lap me in soft Lydian aires;
Married to immortal verse,
Such as the meeting soul may pierce
In notes, with many a winding bout
Of linked sweetness long drawn out,
With wanton heed, and giddy cunning,
The melting voice through mazes running;
Untwisting all the chains, that tie
The hidden soul of harmony.

* i. e. Burnello, a disciple of Lotti.

† Nicola Iomelli, a celebrated composer now living at Naples.

‡ See an Inquiry into the Beauties of Painting by Daniel Webb, Esq. 8vo. 1769, page 167.

Cathedral music and choral service he describes in terms that sufficiently declare his abilities to judge of it, and its effects on his own mind:—

There let the pealing organ blow,
To the full-voic'd choir below,
In service high, and anthems clear,
As may with sweetness through mine ear
Dissolve me into extasies,
And bring all heav'n before mine eyes.

The following sonnet, addressed to his friend Mr. Henry Lawes, points out one of the great excellencies in the composition of music to words:—

Harry, whose tuneful and well-measur'd song
First taught our English music how to span
Words with just note and accent, not to scan
With Midas' ears, committing short and long;
Thy worth and skill exempt thee from the throng.
With praise enough for envy to look wan;
To after-age thou shalt be writ the man,
That with smooth air could humour best our tongue.
Thou honour'st verse, and verse must lend her wing
To honour thee, the priest of Phœbus' choir,
That tun'st their happiest lines in hymn or story.
Dante shall give Fame leave to set thee higher
Than his Casella, whom he woo'd to sing,
Met in the milder shades of Purgatory.

His sonnet to Mr. Lawrence Hyde conveys his sense of the delights of a musical evening:—

Lawrence, of virtuous father virtuous son,
Now that the fields are dank, and ways are mire,
Where shall we sometimes meet, and by the fire
Help waste a sullen day; what may be won
From the hard season gaining? time will run
On smoother, till Favonius re-inspire
The frozen earth; and clothe in fresh attire
The lillie and the rose, that neither sow'd nor spun.
What neat repast shall feast us, light and choice,
Of Attic taste, with wine; whence we may rise
To hear the lute well toucht, or artful voice
Warble immortal notes and Tuscan air?
He, who of those delights can judge, and spare
To interpose them oft is not unwise.

And in his tractate on Education, he recommends the practice of music in terms that bespeak his skill in the science. 'The interim of unsweating themselves regularly, and convenient rest before meat, may both with profit and delight be taken up in recreating and composing their travail'd spirits with the solemn and divine harmonies of musick heard or learnt; either while the skilful organist plies his grave and fancied descant, in lofty fugues, or the whole symphony with artful and unimaginable touches adorn and grace the well studied chords of some choice composer; sometimes the lute, or soft organ-stop waiting on elegant voices either to religious, martial, or civil ditties: which, if wise men and prophets be not extremely out, have a great power over dispositions and manners, to smooth and make them gentle from rustic harshness and distempered passions.' Lord Bacon, in his *Natural History*, has given a great variety of experiments touching music, that shew him to have been not barely a philosopher, an enquirer into the phenomena of sound, but a master of the science of harmony, and very intimately acquainted with the precepts of musical composition.

That we have so few instances of this kind is greatly to be wondered at, seeing that in poetry and painting the case is far otherwise: in the course of a classical education men acquire not only a taste of the beauties of the Greek and Roman poets, but a nice and discriminating faculty, that enables them to discern their excellencies and defects; and in painting, an attentive perusal of the works of eminent artists, aided by a sound judgment, will go near

to form the character of a connoisseur, and render the possessor of it susceptible of all that delight which the art is capable of affording; and this we see exemplified in numberless instances, where persons unskilled in the practice of painting become enabled to distinguish hands, to compare styles, and to mark the beauties of composition, character, drawing, and colouring, with a degree of accuracy and precision equal to that of masters. But few, except the masters of the science, are possessed of knowledge sufficient to enable them to discourse with propriety on music; nor indeed do many attend to that which is its greatest excellence, its influence on the human mind, or those irresistible charms which render the passions subservient to the power of well modulated sounds, and inspire the mind with the most exalted sentiments. One admires a fine voice, another a delicate touch, another what he calls a brilliant finger; and many are pleased with that music which appears most difficult in the execution, and in judging of their own feelings, mistake wonder for delight.

To remove the numberless prejudices respecting music, which those only entertain who are ignorant of the science, or are mistaken in its nature and end; to point out its various excellencies, and to assert its dignity, as a science worthy the exercise of our rational as well as audible faculties, the only effectual way seems to be to investigate its principles, as founded in general and invariable laws, and to trace the improvements therein which have resulted from the accumulated studies and experience of a long succession of ages, such a detail is necessary to reduce the science to a certainty, and to furnish a ground for criticism; and may be considered as a branch of literary history, of the deficiency whereof Lord Bacon has declared his sentiments in the following emphatical terms:

'History is Natural, Civil, Ecclesiastical, and Literary; whereof the three first I allow as extant, the fourth I note as deficient. For no man hath propounded to himself the general state of learning to be described and represented from age to age, as many have done the works of nature, and the state civil and ecclesiastical; without which the history of the world seemeth to me to be as the statue of Polyphemus with his eye out, that part being wanting which doth most shew the spirit and life of the person. And yet I am not ignorant, that in divers particular sciences, as of the juriconsults, the mathematicians, the rhetoricians, the philosophers, there are set down some small memorials of the schools, authors, and books; and so likewise some barren relations touching the invention of arts or usages.

'But a just story of learning, containing the antiquities and originals, of knowledges and their sects, their inventions, their traditions, their diverse administrations and managings, their flourishings, their oppositions, decays, depressions, obliivions, removes, with the causes and occasions of them, and all other events concerning learning, throughout the ages of the world, I may truly affirm to be wanting.*

If anything can be necessary to enforce arguments so weighty as are contained in the above passage; it must be instances of error, resulting from the want of that intelligence which it is the business of history to communicate; and it is greatly to be lamented that music affords more examples of this kind than perhaps any science whatever: for, not to remark on those uncertain and contradictory accounts which are given of the discovery of the consonances, some writers attributing it to Pythagoras, others to Diocles, that relation of the fact which has gained most credit with mankind, as deriving its authority from the Pythagorean school, is demonstrably

false and erroneous.† Again, as to the invention of symphonic harmony, or, as we now call it, music in parts, many ascribe it to the ancients, and say that it was in use among the Greeks, though no evidence of the fact can be drawn from their writings now extant. Others assert it to be a modern improvement, but to whom it is due no one has yet been able to discover.

As to the modern system, there is the irrefragable evidence of his own writings extant, though not in print, that it was settled by Guido Aretinus, a Benedictine monk of the monastery of Pomposa in Tuscany, who flourished about the year 1028; yet this fact, which is also related as an important event in the *Annales Ecclesiastici* of Cardinal Baronius, has been rendered doubtful by an assertion of a writer now living, Signor Martinelli, that one of the same name and place, Fra Guittone d'Arezzo, an Italian poet of great eminence, and who lived about two hundred years after, adjusted that musical scale by which we now sing;‡ and further that the same Fra Guittone was the inventor of counterpoint. Again, those who give the invention of the modern system, and the application thereto of the syllables used in solmisation to the true author, ascribe also to him the invention of music in consonance, and also of the Clavicembalum or harpsichord; whereas the harpsichord is an improvement of the Clavictherium, an instrument known in England in Gower's time by the name of the Cithole, from CISTELLA, a little chest. Another writer asserts, on what authority we are not told, that counterpoint, which implies music in consonance, was invented by John of Dunstable, who flourished anno 1400; and another,§ mistaking the name, attributes it to St. Dunstan, archbishop of Canterbury. Mr. Marpourg of Berlin, a person now living, has taken up this relation, groundless as it is, and in a book of his writing, entitled '*Traité de la Fugue et du Counterpoint*,' has done little less than assert that St. Dunstan invented counterpoint, by reducing into order the rules for composition in four parts, and not a few give credit to his testimony.||

Again we are told, that whereas the Greeks signified the several sounds in their scale by the letters of their alphabet, or by characters derived from them, Guido invented a more compendious method of notation by points stationed on a stave of five lines, and occupying both the lines and the spaces. This assertion is true but in part; for the stave, and that of many lines, was in use near half a century before Guido was born; and all that can be ascribed to him is the placing points as well in the spaces

† Vide infra, page 10, et seq.

‡ 'Fra Guittone d'Arezzo, celebre per i suoi scritti sopra la musica, inventore del contrappunto, e dal quale furono fissati i tuoni, che presentemente si cantano.' Lettere famigliari e critiche di Vincenzio Martinelli, Londra, 1758. Prefazione, page viii. This person had undertaken to write a history of music. See his letters above cited, page 164, containing an apology for his not having published it.

Of this Fra Guittone an account may be seen in the *Istoria della Volgare Poesia* di Crescimbeni, lib. II. page 84. He flourished about 1250, and is celebrated among the best of the ancient Tuscan poets. In the same work, lib. III. page 178, is a sonnet of his writing; and in Mr. Baretti's *History of the Italian Tongue*, prefixed to his Italian Library, page ix. is a fable of Fra Guittone, which Baretti says may be taken for a composition of yesterday.

§ Wolfgang Caspar Printz, in his *History of Music*, written in the German language, and published at Dresden in the year 1690, who has given a relation purporting that 'In the year of our Lord, 940, Dunstan, otherwise Dunstaphus, an Englishman, being very young, betook himself to the study of music, and thereby acquired immortal fame. He was the first that composed songs of different parts, that is to say, Bass, Tenor, Descant, and Vagant or Alt,' page 104, sect. 23. The whole relation is an error, arising from a mistaken sense of a passage in the *Præceptiones Musicae Poeticæ* of Johannes Nucleus, a writer on music in the year 1612. Vide infra, page 176 in note, 174 in note, 651 in note.

|| 'Dunstan, Archevêque de Canterbury, qui vivoit dans le dixième siècle, a toujours eu l'honneur d'avoir commencé, ainsi que d'avoir frayé le chemin aux autres. Il redigea en ordre les regles de la composition à quatre parties, et par là donna une nouvelle époque à la musique.' Partie II. page vi.

* Of the advancement of Learning, book II.

as on the lines, which it must be owned is an ingenious and useful contrivance.

To assist the memory and facilitate the practice of sol-misation, it is also said that Guido made use of the left hand, giving to the top of the thumb the note *GAM UT*, to the joint below it *A RE*, to the next *B MI*, and so on, placing the highest note of his system, *E LA*, at the extremity of the hand, viz., the tip of the middle finger; but nothing of this kind is to be found, or indeed is mentioned, or even hinted at, in any of his writings, and we may therefore conclude that the whole is an invention of some other person.

Little less confusion attends the relations extant respecting the invention of the *Cantus Mensurabilis*, and those marks or characters used to signify the several lengths or durations of notes. The vulgar tale is, that John de Muris, a Norman, and a doctor of the Sorbonne about the year 1330, invented eight musical characters, namely, the *Maxima*, or as we call it, the *Large*, the *Long*, the *Breve*, *Semibreve*, *Minim*, *Semiminim* or *Crotchet*, *Chroma* or *Quaver*, and the *Semichroma*, assigning to each a several length in respect of time or duration.* Now upon the face of the relation there is great reason to conclude, that in the original institution of the *Cantus Mensurabilis*, the *semibreve* was the shortest note; but there is undeniable evidence that as well the *minim* as the notes in succession after it, were of comparatively late invention.

But this is not all; De Muris was not a Norman, but an Englishman: he was not the inventor of the *Cantus Mensurabilis*: not he, but a person of the name of Franco, a scholastic, as he is called, of Liege, about the middle of the eleventh century invented certain characters to signify the duration of sounds,† that is to say, the four first above mentioned.

Another prevailing error respecting music has got possession of the minds of many people, viz., that those singularly sweet and pathetic melodies with which the Scots music abounds, were introduced into it by David Rizzio, an Italian musician, and a favourite of Mary, queen of Scots; the reverse is the truth of the matter, and that by the testimony of the Italians themselves; the Scots tunes are the genuine produce of Scotland; those of greatest merit among them are compositions of a king of that country; and of these some of the most celebrated madrigals of one of the greatest of the Italian composers are avowed imitations.‡

Again, few are sufficiently acquainted with the history of the science, and in particular how long the several musical instruments now known by us have been in use, to prevent being imposed on by pretended new inventions: the harp of *Æolus*, as it is called, on which so much has been lately said and written, was constructed by Kircher above a century ago, and is accurately described in his *Musurgia*; as is also the perpendicular harpsichord, and an instrument so contrived as to produce sound by the friction of wheels, from which the modern lyrichord is manifestly taken. The new system, as it is called, of the flute abec, proposed about forty years ago by the younger Stanesby, is in truth the old and original system of that instrument, and is to be found in Mersennus; and the clarinet, an instrument unknown in England till within these last twenty years, was invented by John Christopher Denner, a wind musical instrument maker of Leipsic above a century ago.§

* Nicola Vicentino, a writer of the sixteenth century, with some degree of ingenuity, attempts to shew that these characters are but different modifications of the round and square b, which had been introduced into Guido's scale for another purpose.

† Vide infra, pages 217, 221, 258.

‡ Vide infra, page 563.

§ Vide infra, page 651.

Farther, it has for the honour of this our native country been said of Purcell, that his music was very different from the Italian; that it was entirely English, that it was masculine.¶ Against the two first of these assertions we have his own testimony in the preface to one of his works, wherein he says that he has endeavoured at a just imitation of the most famed Italian masters, with a view, as he adds, to bring the gravity and seriousness of that sort of music into vogue.¶ As to the third, the judicious peruser of his compositions will find that they are ever suited to the occasion, and are equally calculated to excite tender, and robust or manly affections.

Lastly, of the many who at this time profess to love music, few are acquainted with the characters, and even the names of those many eminent persons celebrated for their skill and great attainments in the science, and who flourished under the patronage of the greatest potentates, previous to the commencement of the present century; and, with respect to those of our own country, it is true there is scarce a boy in any of the choirs in the kingdom but knows that Tallis and Bird composed anthems, and Child, Batten, Rogers, and Aldrich services; but of their compositions at large, and in what particulars they excelled, even their teachers are ignorant.

Under a thorough conviction of the benefits that must result from the kind of intelligence here recommended, attempts have been made at different periods to trace the rise and progress of music in a course of historical narration; and let it not be deemed an invidious office, if those defects in the attempts of others are pointed out, which alone can justify the present undertaking.

In the *Menagiana*, tome I. page 303, mention is made of a canon of Tours of the name of Ouvard, who wrote a history of music: Mattheson, in his *Vollkommenen Capellmeister*, takes notice of this work, and says that it comes down to the end of the seventeenth century, and is perhaps extant in MS. in some library at Paris. But the first attempt of this kind in print is a treatise of Johannes Albertus Bannius, '*De Musicæ origine, progressu et denique studio bene instituendo*,' published in 1637, in octavo.

Next to this, in point of time, is the *History of Music* of Wolfgang Caspar Printz, chapel-master and director of the choir of the church of Sorau, printed at Dresden in the year 1690, in a small quarto volume, with the title of '*Historische Beschreibung der Edelen Singund Kling-kunst*.' Neither of the two latter works can be considered as a history of the science; the first of them is a very small volume, and the other not a large one, containing little more than a list of writers on music disposed in chronological order.

The appendix of Dr. Wallis to his edition of Ptolemy, published in 1682, though not a history of the science, contains many historical particulars respecting music, besides that in sundry instances it renders intelligible the doctrines of the ancient writers. It is written with great accuracy and perspicuity, and abounds with instances of that acuteness and penetration for which the author is celebrated.

In 1683, the Sieur Gabriel Guillaume Nivera, organist of the chapel of Lewis XIV. published '*Dissertation sur le Chant Gregorien*,' a small octavo volume, but in effect a history of ecclesiastical music, with a relation of the many corruptions it has undergone. In it are many curious passages relating to the subject, extracted from the fathers and the ritualists, with the observations of the author, who appears to have been a learned man in his profession.

¶ Granger's *Biographical History of England*, as it is called, vol. II., part II., class X. tit. *MUSICIANS*, art. *HENRICUS PURCELL*.

¶ Vide infra, page 744.

In 1695 Gio. Andrea Angelini Bontempi, of Perugia, published in a thin volume a work of some merit, entitled 'Historia Musica.' Berardi mentions a work of one Pietro Arragona, a Florentine, entitled 'Istoria Armonica,' but Brossard doubts the existence of it.*

A history of the pontifical chapel, and of the college of singers thereto belonging, is contained in a work entitled 'Osservazioni per ben regolare il Coro de i Cantori della Cappella Pontificia, tanto nelle Funzioni ordinarie che straordinarie,' by Andrea Adami da Bolsena, Maestro della Cappella Pontificia, published at Rome in 1711, in a quarto volume. In this book are many curious particulars.

There is also extant in two volumes duodecimo, but divided into four, a book entitled 'Histoire de la Musique et de ses Effets,' printed first at Paris in 1715, and afterwards at Amsterdam in 1725. The materials for this publication were certain papers found in the study of the Abbé Bourdelot, and others of his nephew Bonnet Bourdelot, physician to the king of France, the letters of the Abbé Ragueneau and others, on the comparative merits of the Italian and French opera and music, together with sundry other papers on the same subject. The publisher was

Bonnet, a nephew of the Abbé Bourdelot; and the best that can be said of the work is, that the whole is a confused jumble of intelligence and controversy; and, saving that it contains some curious memoirs of Lully, and a few other of the French musicians, has very little claim to attention.

About the year 1730, Mr. Peter Prelleur, an able musician and organist, published a work entitled 'The modern Music-master, containing an introduction to singing, and instructions for most of the instruments in use.' At the end of this book is a brief history of music, in which are sundry particulars worth noting: it has no name to it, but was nevertheless compiled by the above person.

John Godfrey Walther, a professor of music, and organist of the church of St. Peter and Paul at Weimar, published in 1732 a musical Lexicon or Bibliothéque, wherein is a great variety of information respecting music and musicians of all countries and ages. Mattheson of Hamburg, in his 'Critica Musica,' his 'Orchestre,' and a work entitled 'Vollkommenen Capellmeister,' i. e. the perfect Chapelmaster, has brought together many particulars of the like kind; but the want of method renders these compositions, in an historical view, of little use.

In the year 1740, an ingenious young man of the name of Grassineau,† published a Dictionary of Music in one octavo volume, with a recommendation of the work by Dr. Pepusch, Dr. Greene, and Mr. Galliard. The book had the appearance of a learned work, and all men wondered who the author could be: it seems he had been an amanuensis of the former of these persons. The foundation of this dictionary is a translation of that of Sebastian Brossard; the additions include all the musical articles contained in the two volumes of Chambers's Dictionary, with perhaps a few hints and emendations furnished by Dr. Pepusch. The book nevertheless abounds with errors, and, though a useful and entertaining publication, is not to be relied on.

In 1756, Fr. Wilhelm Marpourg, a musician of Berlin, published in a thin quarto volume, 'Traité de la Fugue et du Contrepoint,' the second part whereof is a brief history of counterpoint and fugue. The same person is also the author of a work entitled 'Critische Einleitung in die Geschichte und Lehrsake der alten und neuen Musick,' printed at Berlin in 1759. It is part of a larger work, and the remainder is not yet published.

The 'Storia della Musica' of Padre Martini of Bologna, of which as yet only two volumes have been published, and those at the distance of thirteen years from each other, is a learned and curious work; but the great study and labour bestowed by the author in compiling it, make us despair of ever seeing it completed.

The 'Histoire generale, critique, et philologique de la Musique,' of Mons. De Blainville, printed at Paris in 1767, in a thin quarto volume, has very little pretence to the title it bears: like some other works of the kind, it is diffuse where it ought to be succinct, and brief where one would wish to find it copious.

A character very different is due to a work in two volumes, quarto, entitled 'De Cantu et Musica sacra, a prima Ecclesie Ætate usque ad præsens Tempus; Auctore Martino Gerberto, Monasterii et Congregationis Sancti Blasii in Silva Nigra Abbate, Sacrique Romani Imperii Princeps. Typis San-Blasianis, 1774.' In this most valuable work the author has with great learning, judgment, and candour, given the history of ecclesiastical music; and the author of the present work felicitates himself on finding his sentiments on the subject, particularly of the church composers, and the corruptions of the church style, confirmed by the testimony of so able a writer. He is farther happy to see that without any communication with this illustrious dignitary, and without having perused his book, by the help of materials, which this country alone has furnished, he has been able to pursue a similar track of narration, and to relate and authenticate many facts contained therein.‡

At the beginning of this present year 1776, the musical world were favoured with the first volume of a work entitled 'A General History of Music from the earliest Ages to the present Period, with a Dissertation on the Music of the Ancients, by Charles Burney, Mus. D., F. R. S.' The author in the proposals for his subscription has given assurances of the publication of a second, which we doubt not he will make good.

From those who have thus taken upon them to trace the rise and progress of music in a course of historical deduction, we pass to others who appear to have made collections for the like purpose, but were defeated in their intentions of benefiting the science by their labours.

And first Anthony Wood, who himself was a proficient in music, and entertained an enthusiastic fondness for the art, had it seems meditated a history of musicians, a work which his curiosity and unwearied industry rendered him very fit for: to this end he made a collection of memoirs, which is extant, in his own hand-writing, among the manuscripts in the Ashmolean Museum; and in the printed catalogue thereof is thus numbered and described: '8568. 106. Some materials toward a history of the lives and compositions of all English musicians; drawn up according to alphabetical order in 210 pages by A. W.' Of these materials he seems to have availed himself in the Fasti Oxonienses, wherein are contained a great number of memoirs of eminent English musicians, equally curious and satisfactory, the perusal whereof in the original MS. has contributed to render this work somewhat less imperfect than it must have been without such information as they afford.

Dr. Henry Aldrich, dean of Christ Church, an excellent scholar, and of such skill in music, that he holds a place among the most eminent of our English church musicians, had formed a design of a history of music on a most extensive plan. His papers in the library of Christ Church college, Oxford, have been carefully perused: among them are a great number of loose notes, hints, and memo-

‡ The fact is, that the fifth volume of this work was printed off in July in the present year, and the former ones in succession in the years preceding, and the two volumes of the Abbot Gerbert's work came to hand in the month immediately following.

* Catalogue of writers on music at the end of his 'Dictionnaire de Musique,' octavo, page 369.

† See an account of him page 30, in the notes.

randa relating to music and the professors of the science; in the collection whereof he seems to have pursued the course recommended by Brossard in the catalogue of writers on music at the end of his *Dictionnaire de Musique*, page 367; but among a great multitude of papers in his own hand-writing, there are none to be found from whence it can with certainty be concluded that he had made any progress in the work.

Nicola Francesco Haym, a musician, and a man of some literature, published, above forty years ago, proposals containing the plan of a history of music written by himself, but, meeting with little encouragement, he desisted from his design of printing it.

Much intelligence respecting music might have been hoped for from the abilities and industry of Ashmole, Dr. Hooke, and Sir William Petty, the two former of whom had been choristers, the one in the cathedral of Litchfield, the other of Christ Church, Oxford: the last of the three was professor of music at Gresham college; but these persons abandoning the faculty in which they had been instituted, betook themselves to studies of a different kind: Ashmole, at first a solicitor in Chancery, became an antiquary, a herald, a virtuoso, a naturalist, and an Hermetic philosopher: Hooke took to the study of natural philosophy, mechanics, and architecture, and attained to great skill in all;* and Petty, choosing the better part, laid the foundation of an immense estate by a various exertion of his very great talents, and was successively a physician, a mathematician, a mechanic, a projector, a contractor with the government, and an improver of land.

Enough it is presumed has been said to prove the utility, and even the necessity, in order to a competent knowledge of the science, of a History of Music, in the deduction whereof the first object that presents itself to view is the system of the ancient Greeks, adjusted, it must be confessed, with great art and ingenuity, but labouring under many defects, which, if we are not greatly deceived, are remedied in that of the moderns. Of the origin of this system we have such authentic intelligence as leaves little room to doubt that it was invented by Pythagoras, a name sufficiently known and revered, and the subsequent deduction of the progress of the science, involving in it the names and improvements of men well known, such as Philolaus, Archytas of Tarentum, Aristoxenus, Euclid, Nicomachus, Ptolemy, and many

* It is said by Anthony Wood of Dr. Hooke, that, being at Westminster-school, he lodged and dined in the house of Mr. Busby, the master, and that there, of his own accord, he learned to play twenty lessons on the organ, and invented thirty several ways of flying. *Athen. Oxon.* vol. II. col. 1039. The latter of these facts must stand on the authority of the relator, or rather his authors, Dr. Busby and the great Dr. Wilkins of Wadham college; but the former is rendered highly probable by the following anecdote respecting Dr. Busby, the communication whereof we owe to Dr. Wetenhall, one of Busby's scholars, and afterwards bishop of Cork and Ross, viz.: that 'the first organ he ever saw or heard was in his, Dr. Busby's house; and that the same was kept for sacred use, and that even when it was interdicted.' Dedication of a treatise entitled 'Of Gifts and Offices in the public Worship of God, by Edward Wetenhall, D.D., Chanter of Christ Church, Dublin, 8vo. 1679.' That he was also eminently skilled in architecture, may be inferred from an assertion of Dr. Ward, in his life of Sir Christopher Wren, among the Gresham professors, viz.: that he greatly assisted Sir Christopher in re-building the public edifices. Wood goes so far as to say that Hooke designed New Bedlam, Montague-house, the College of Physicians, and the pillar on Fish-street Hill; but the erection of the latter of these edifices is ascribed to Sir Christopher Wren. As to Montague-house and the College of Physicians, there are in Moxon's *Mechanic Exercises*, under the head of Bricklayer's Work, intimations that they were both designed by Hooke; and Strype, in his edition of Stowe's Survey of London, speaking of Aske's hospital at Hoxton, says it was built after a modern design of Dr. Hooke.

Of this latter person it may be said, that he was perhaps one of the greatest proficients in the art of thriving of his time: by places, by projects, and by grants, some to himself, and others to his wife, he acquired estates, real and personal, to the annual amount of £15,000, to the accumulation of which wealth we may well suppose that the virtue of parsimony contributed not a little, and the rather as he suffered a natural daughter of his to be an actress on the stage under Sir William D'Avenant at the Duke's theatre in Dorset-Garden.

others, may truly be called history, as being founded in truth; and the utility and certainty of their relations will teach us to distinguish between fact and fable.

It is much to be lamented that the greater part of what we believe touching music, is founded on no better authority than the fictions of poets and mythologists, whose relations are in most instances merely typical and figurative; such must the stories of Orpheus and Amphion appear to be, as having no foundation in truth, but being calculated solely for the purpose of moral instruction.

And with regard to facts themselves, a distinction is to be made between such as are in their own nature interesting, and those that tend only to gratify an idle curiosity: to instance in the latter, what satisfaction does the mind receive from the recital of the names of those who are said to have increased the chords of the primitive lyre from four to seven, Chorebus, Hyagnis, and Terpander; or when we are told that Olympus invented the enarmonic genus, as also the Harmatian mood; or that Eumolpus and Melampus were excellent musicians, and Pronomus, Antigenides, and Lamia celebrated players on the flute? In all these instances, where there are no circumstances that constitute a character, and familiarise to us the person spoken of, we naturally enquire who he is; and, for want of farther information, become indifferent as to what is recorded of him.

Mr. Wollaston has a remark upon the nature of fame that seems to illustrate the above observation, and indeed goes far beyond the case here put, inasmuch as the persons by him spoken of, are become wellknown characters: his words are these: 'When it is said that Julius Cæsar subdued Gaul, beat Pompey, changed the Roman commonwealth into a monarchy, &c. it is the same thing as to say, the conqueror of Pompey was Cæsar; that is, Cæsar and the conqueror of Pompey are the same thing; and Cæsar is as much known by one designation as the other. The amount then is only this: that the conqueror of Pompey conquered Pompey; or somebody conquered Pompey; or rather, since Pompey is as little known as Cæsar, somebody conquered somebody.'†

That memorials of persons, who at this distance of time must appear thus indifferent to us, should be transmitted down to posterity, together with those events that make a part of musical history, is not to be wondered at; and Plutarch could never have recorded the facts mentioned by him in his Dialogue on Music, had he not also given the names of those persons to whom they are severally ascribed; and if they now appear uninteresting we may reject them. But the case is far otherwise with respect to what is told us of the marvellous power and efficacy of the ancient music. Aristoxenus expressly asserts that the foundation of ingenuous manners, and a regular and decent discharge of the offices of civil life, are laid in a musical education; and Plutarch, speaking of the education of Achilles, and relating that the most wise Chiron was careful to instruct him in music, says, that whoever shall in his youth addict himself to the study of music, if he be properly instructed therein, shall not fail to applaud and practise that which is noble and generous, and detest and shun their contraries: music teaching those that pursue it to observe decorum, temperance, and regularity; for which reason he adds, that in those cities which were governed by the best laws, the greatest care was taken that their youth should be taught music. Plato, in his treatise *De Legibus*, lib. II., insists largely on the utility of this practice; and Polybius, lib. IV., cap. iii., scruples not to attribute the misfortunes of the Cynethæans, a people of Arcadia, and that general corruption of their

† Religion of Nature delineated, page 117.

manners, by him described, to the neglect of the discipline and exercise of music; which he says the ancient Arcadians were so industrious to cultivate, that they incorporated it into, and made it the very essence of, their government; obliging not their children only, but the young men till they attained the age of thirty, to persist in the study and practice of it. Innumerable also are the passages in the ancient writers on harmonics wherein the power of determining the minds of men to virtue or vice is ascribed to music with as little doubt of its efficacy in this respect, as if the human mind was possessed of no such power as the will, or was totally divested of those passions, inclinations, and habits, which constitute a moral character.

Now, forasmuch as we at this day are incapable of discovering any such power as is here attributed to mere musical sounds, we seem to be warranted in withholding our assent to these relations, till the evidence on which they are grounded becomes more particular and explicit; or it shall be shown that they are not, what some men conceive them to be, hyperbolical forms of speech, in which the literal is as far from the true sense, as it is in the stories of the effects of music on inanimate beings. If indeed by music we are to understand musical sounds jointly operating with poetry, for this reason that music is ever spoken of by the ancients as inseparably united with poetry; and farther, because we are told that the ancient poets, for instance, Demodocus, Thaletas of Crete, Pindar, and others, not only composed the words, but also the music to their odes and poems, and sang them to the lyre; a degree of efficacy must be allowed it, proportioned to the advantages which it could not but derive from such an union.* But here a difficulty will arise, which, though it does not destroy the credit of these reports, as they stand on the footing of other historical facts, would incline us to suspect that the music here spoken of was of a kind very different from what it is in general conceived to be, and that for the following reason.

We know by experience that there is no necessary connection between music and poetry; and such are com-

* Quintilian has elegantly expressed his sense of the joint efficacy of music and poetry in the following passage: 'Namque et voce et modulatione grandia elata, jucunda dulciter, moderata leniter canit, totaque arte consensit cum eorum, quæ dicuntur, affectibus.' Inst. Orat. lib. I. cap. x.

But, notwithstanding this observation, which, as far as it goes, must be allowed to be just, the powers of music will be found inadequate to the expression of many of those sentiments in poetry which are comprehended in the ideas of the beautiful and the sublime; such, for instance, as these:—

Where glowing embers round the room
Teach light to counterfeit a gloom.

Where I may oft outwatch the bear,
With thrice great Hermes, and unsphere
The spirit of Plato to unfold
What worlds or what vast regions hold
The immortal mind.

Sentiments that defy the utmost powers of music to suit them with correspondent sounds.

Nor will it be found that the melody or the cadence of sounds are either of them so peculiarly appropriated to particular passions or descriptions, as to rank the faculty of expression among the principal excellences of music. And in proof of this assertion some examples might be given that would stagger an infidel in these matters. The late Dr. Brown, when he had written his ode entitled the Cure of Saul, for the music to it made a selection from the works of the most celebrated composers, of such favourite movements as he thought would best express the sense of the words; in particular he took the saraband in the eighth sonata of Corelli's second opera for a solo air; and that most divine movement in Purcell's 'O give thanks,' 'Remember me, O Lord,' for a chorus; and any stranger would have thought that the music had been originally composed to the words: the music to that admired song in Samson, 'Return, O God of hosts,' was taken from an Italian cantata of Mr. Handel, composed in his youth; as was also the music to the other, 'Then long eternity,' in the same oratorio: farther, the chorus in Alexander's Feast, 'Let old Timotheus yield the prize,' saving the addition of one of the interior parts, was originally an Italian tria; as was also that in the Il Penseroso, 'These pleasures melancholy give.' Finally, a great part of the music to Mr. Dryden's lesser ode for St. Cecilia's Day was originally composed by Mr. Handel for an opera entitled Alceste, written by Dr. Smollet, but never performed.

petent judges of either, know also that though the powers of each are in some instances concurrent, each is a separate and distinct language. The poet affects the passions by images excited in the mind, or by the forcible impression of moral sentiments; the musician by sounds either simple and harmonical only in succession, or combined: these the mind, from its particular constitution, supposing it endued with that sense which is the perfection of the auditory faculty, without referring to any other subject or medium, recognizes as the language of nature; and the affections of joy, grief, and a thousand nameless sensations, become subservient to their call.

As the powers of music and poetry are thus different, it necessarily follows that they may exist independently of each other; and the instances are as numerous of poets incapable of articulating musical sounds, as of musicians unpossessed of a talent for poetry.

If then the poets of the ancients were only such as to the harmony of their verse, were capable of joining that of music, by composing musical airs, and also singing them, and that to an audience grounded and well instructed in music, what can we suppose the music of their odes to have been? Perhaps little else than bare recitation; not in true musical intervals, but with such inflections of the voice as accompany speech when calculated to make a forcible impression on the hearers.

As to the relations of the effects of music in former ages on the passions of men, and of its provoking them to acts of desperation, it may be said that they afford no greater proofs of its influence on the passions than modern history is capable of furnishing.† But there are

† Vide infra, pages 118, 119; and Plutarch relates that Antigonus, the musician, playing before Alexander the Great, in a measure of time distinguished by the name of the Harmatian mood, enflamed the hero to such a degree, that, leaping from his seat, and drawing his sword, he in a frenzy of courage assailed those who were nearest him. In Crat. II. De Fortun. vel Virtut. Alexandr. Magn.

To these instances may be opposed the following, which modern history affords. The first is related of Ericus, king of Denmark, surnamed the Good, who reigned about 1180, and is to the following purport. When Ericus was returned into his kingdom, and held the yearly assembly, he was greatly pleased with the industry both of his soldiers and artificers. Among other of his attendants was a musician, who asserted that by the power of his art he was able to excite in men whatsoever affections he thought proper; and to make the sad and cheerful, the cheerful sad, the angry placid, and such as were pleased discontented, and even drive them into a raging madness; and the more he insisted on his abilities the greater was the king's desire to try them. The artist now began to repent his having thus magnified his talent, foreseeing the danger of making such experiments on a king, and he was afraid that if he failed in the performance of what he had undertaken, he should be esteemed a liar; he therefore entreated all who had any influence over the king to endeavour to divert him from his intention to make proof of his art; but all without effect, for the more desirous he was to evade the trial of his skill, the more the king insisted on it. When the musician perceived that he could not be excused, he begged that all weapons capable of doing mischief might be removed, and took care that some persons should be placed out of the hearing of the Cithara, who might be called in to his assistance, and were, if necessity required it, to snatch the instrument from his hands, and break it on his head. Every thing being thus prepared, the citharist began to make proof of his art on the king, who sat with some few about him in an open hall; first, by a grave mode, he threw a certain melancholy into the minds of the auditors; but, changing it into one more cheerful, he converted their sadness into mirth that almost incited his hearers to dancing; then varying his modulation, on the sudden he inspired the king with fury and indignation, which he continued to work up in him till it was easy to see he was approaching to frenzy. The sign was then given for those who were in waiting to enter; they first broke the Cithara according to their directions, and then seized on the king; but such was his strength, that he killed some of them with his fist; being afterwards overwhelmed with several blows, his fury became pacified, and, recovering his reason, he was grievously afflicted that he had turned his wrath against his friends. Saxo Grammaticus, in Hist. Danicæ, ed. Bæll, lib. XII. page 113. The same author adds, that he broke open the doors of a chamber, and, snatching up a sword, ran four men through the body; and that when he returned to his senses he made a pilgrimage to Jerusalem as an expiation of his crime. Olaf Magnus, who tells the same story, says that he afterwards died in the island of Cyprus. Vide Olaf Magnus, in Hist. Gent. Sept. lib. XV. cap. xxviii. and Krantzius, in Chron. Regn. Danicæ, Suecicæ, et Norvegicæ.

Hieronymus Magius gives the following relation of a fact recent in memory in the year 1564: Cardinal Hippolyto de Medicis, being a legate in the army at Pannonia, the troops being about to engage, upon sounding the alarm by the trumpets and drums, was so enflamed with a martial ardour, that, girding on his sword, he mounted his horse, and could not be restrained from charging the enemy at the head of those

others that stagger human belief, and leave us in doubt whether to give or refuse credit to them; such, for instance, are the stories of the cure of diseases, namely, the sciatica, epilepsy, fevers, the bites of vipers, and even pestilences, by the power of harmony.

What an implicit assent has been given to the reports of the sovereign efficacy of music in the cure of the frenzy occasioned by the bite of the Tarantula! Baglivi, an eminent physician, a native of Apulia, the country where the Tarantula, a kind of spider, is produced, has given the natural history of this supposed noxious insect, and a variety of cases of persons rendered frantic by its bite, and restored to sanity and the use of their reason; and in Kircher's *Musurgia* we have the very air or tune by which the cure is said to be effected. Sir Thomas Brown, that industrious exploder of vulgar errors, has let this, perhaps the most egregious of any that he has animadverted on, pass as a fact not to be controverted; and Dr. Mead has strengthened the belief of it by his reasoning on the nature of poisons. After all the whole comes out to be a fable, an imposture calculated to deceive the credulous, and serve the ends of designing people inhabiting the country.*

The natural tendency of these reflections is to draw on a comparison of the ancient with modern music; which latter, as it pretends to no such miraculous powers, has been thought by the ignorant to be so greatly inferior to the former, as scarce to deserve the name. In like manner do they judge of the characters of men, and the state of human manners at remote periods, when they compare the events of ancient history, the actions of heroes, and the wisdom of legislators, with those of modern times, inferring from thence a depravity in mankind, of which not the least trace is discernible.

This mistaken notion seems to be but the necessary consequence of that system of education which directs the attention of young minds to the discoveries and transactions of the more early times; assigning, as the rule of civil policy, and the standard of moral perfection and excellence in arts, the conduct, the lives, and works of men whose greatest achievements are only wonderful as they were rare; whose valour was brutality, and whose policy was in general fraud, or at best craft; and whose inventions and discoveries have in numberless instances been superseded by those of later times. To these, which we may call classical prejudices, we are to impute those numerous and reiterated complaints which we meet with of the degeneracy of modern times; and when they are once imbibed, complaints of the declension of some arts, and of the loss of others, as also of the corruption of manners, appear to be but of course. Whether, therefore, our reverence for antiquity has not been carried too far both as to matters of science and morality, comprehending in the latter the virtue of justice, and the qualities of personal courage, general benevolence, and refined humanity, of which the examples are not less numerous and conspicuous in modern than in ancient history, is a question well worthy consideration.†

whose duty it was to make the onset. Var. Lect. seu Miscell. Venet. 1664, lib. IV. cap. xlii.

And, lastly, it is related, that at the celebration of the marriage of the duke of Joyeuse, a gentleman was so transported with the music of Claude le Jeune, performed at that solemnity, that he seized his sword, and swore that, unless prevented, he must fight with some one present; but that a sudden change in the music calmed him. Bayle, art. GOURMEL, in not. Vide infra, page 434.

* Vide infra, page 639, in note.

† In a book, which few readers at this day think worth looking into, Dr. Hakewill's *Apologie for the Power and Providence of God*, are the following sentiments touching the reverence due to antiquity: 'Antiquity I unfeignedly honour and reverence; but why I should reverence the rust and refuse, the dross and dregs, the warts and wens thereof, I am yet to seek.—As in the little, so in the great world, reason will tell you that old age or antiquity is to be accounted by the farther distance from the beginning, and the nearer approach to the end; and as grey

Of the loss of many arts, that contribute as well to the benefit as delight of mankind, much has been said; and there is extant a large volume, written in Latin by Guido Pancirollus, a lawyer of Padua, entitled '*De rebus memorabilibus deperditis et noviter inventis*,' which has not escaped censure for the mistakes and peccilities with which it abounds, the tendency thereof being to shew that many arts known to the ancients are either totally lost, or so greatly depraved, that they can scarcely be said to have an existence among us.‡ In this book, which has proved a plentiful source of intelligence to such as have laboured to depreciate all modern attainments, it is roundly asserted of music, which was anciently a science, that there are not the least footsteps remaining: and farther, that the Cardinal of Ferrara, by whom it is supposed is meant Hippolyto de Este, the patron of Vicentino, took great pains to recover it, but all to no purpose.§

Such as seem to have adopted the opinion of Pancirollus with respect to music, for example, Dr. Pepusch, and

'beards are for wisdom and judgment to be preferred before young green heads, because they have more experience in affairs; so likewise for the same cause the present times are to be preferred before the infancy or youth of the world, we having the history and practice of former ages to inform us, which they wanted.—In disgracing the present times you disgrace antiquity properly so called.' Book V. page 132.

Farther to this purpose the learned and sagacious Sir Thomas Brown delivers his sentiments in the following terms: 'The mortal enemy unto knowledge, and that which hath done the greatest execution upon truth, hath been a peremptory adhesion unto authority; and more especially the establishing of our belief upon the dictates of antiquity. For, (as every capacity may observe) most men of ages present, so superstitiously do look upon ages past, that the authorities of the one exceed the reasons of the other: whose persons indeed being far removed from our times, their works, which seldom with us pass uncontrolled, either by contemporaries, or immediate successors, are now become out of the distance of cavies: and the farther removed from present times, are conceived to approach the nearer unto truth itself. Now hereby methinks we manifestly delude ourselves, and widely walk out of the track of truth.'

'For, first, men hereby impose a thralldom on their times, which the ingenuity of no age should endure, or indeed the presumption of any did ever yet enjoin. Thus Hippocrates, about two thousand years ago, conceived it no injustice either to examine or refute the doctrines of his predecessors: Galen the like, and Aristotle the most of any. Yet did not any of these conceive themselves infallible, or set down their dictates as verities irrefragable; but when they either deliver their own inventions, or reject other men's opinions, they proceed with judgment and ingenuity: establishing their assertions, not only with great solidity, but submitting them also unto the correction of future discovery.'

'Secondly, men that adore times past, consider not that those times were once present, that is, as our own are at this instant; and we ourselves unto those to come, as they unto us at present: as we rely on them, even so will those on us, and magnify us hereafter, who at present condemn ourselves. Which very absurdity is daily committed amongst us, even in the esteem and censure of our own times. And, to speak impartially, old men, from whom we should expect the greatest example of wisdom, do most exceed in this point of folly; commending the days of their youth, which they scarce remember, at least well understood not; extolling those times their younger years have heard their fathers condemn, and condemning those times the gray heads of their posterity shall commend. And thus it is the humour of many heads to extol the days of their forefathers, and declaim against the wickedness of times present. Which, notwithstanding they cannot handsomely do, without the borrowed help and satyrs of times past, condemning the vices of their own times, by the expressions of vices in times which they commend; which cannot but argue the community of vice in both. Horace, therefore, Juvenal, and Persius were no prophets, although their lines did seem to indigitate and point at our times. There is a certain list of vices committed in all ages, and declaimed against by all authors, which will last as long as humane nature; which, digested into common places, may serve for any theme, and never be out of date until Dooms day. Enquiries into Vulgar and Common Errors, Book I. Chap. vi.

‡ Of the many instances of arts or inventions lost, or in a state of depravity at this time, there are very few, if any, of which evidence can be found, or at least that have not been succeeded by others tending to the same purpose, and of far greater utility. To instance in a few particulars, instead of the papyrus of the ancients, prepared from the leaves of a certain bullrush, we have the paper of the moderns; in the room of their specular stones, glass; and of clepsydrae, instruments that measured time by the dropping of water, or the falling of sand, clocks and watches. As to the art of staining or painting glass, which ceased to be practised about the Reformation, and has almost ever since been deplored as a lost invention, it is effected by chemical means, and is at this day in as great perfection as ever. Vide Chambers's *Dictionary of Glass*. Anecdotes of Painting in England by Mr. Horace Walpole, vol. II. page 15.

§ A like attempt was made in France in the year 1570, by the establishment of an academy under the direction of Jean Antoine Bail

a few of his disciples, have asserted as an instance in support of it, that the chromatic and enarmonic genera are now neither practised nor accurately known. Farther they add, that of the various modes of the ancients, only two are remaining, viz., those which answer to the keys A and C; for, say they, the ancients took the tones and semitones in order as they naturally arise in the diapason system, and, without any dislocation of either, considered the progression from any fundamental chord as a mode or key, and formed their melodies accordingly.

With regard to the enarmonic genus, it will in the ensuing work be shewn that the ancients themselves suffered it to grow into disuse by reason of its intricacy; and therefore it cannot so properly be said to have been lost, as that it is rejected, and the rather as we are assured that Salinas and others have accurately determined it: * of the chromatic as much seems to have been retained as is necessary to the perfection of the diatonic; and as to the modes, it will also be shewn that there never was, nor can there in nature be more, or any other than the two abovementioned; and consequently that in this respect music has sustained no injury at all.

The loss of arts is a plausible topic of declamation, but the possibility of such a calamity by other means than a second deluge, or the interposition of any less powerful agent than God himself, is a matter of doubt; and when appearances every where around us favour the opinion of our improvement not only in literature, but in the sciences and all the manual arts, it is wonderful that the contrary notion should ever have got footing among mankind.

As to the general prejudices in behalf of antiquity, it has been hinted above that a reason for them is to be found in that implicit belief which the course of modern education disposes us to entertain of the superior virtue, wisdom, and ingenuity of those, who in all these instances we are taught to look on as patterns the most worthy of imitation; but it can never be deemed an excuse for some writers for complimenting nations less enlightened than ourselves with the possession or enjoyment of arts which it is pretended we have lost; as they do when they magnify the attainments of nations comparatively barbarous, and making those countries on which the beams of knowledge can scarcely be said to have yet dawned the theatres of virtue and the schools of science, recommend them as fit exemplars for our imitation.

Of this class of authors, Sir William Temple and Isaac Vossius seem to be the chief; the one a statesman retired from business, an ingenious writer, but possessed of little learning, other than what he acquired in his later years, and which it is suspected was not drawn from the purest sources; the other a man of great erudition, but little judgment, the weakness whereof he manifested in a childish credulity, and a disposition to believe things incredible. These men, upon little better evidence than the reports of travellers, and the relations of missionaries, who might have purposes of their own to serve, have celebrated the policy, the morality, and the learning of the Chinese, and done little less than proposed them as examples of all that is excellent in human nature.†

and Joachim Theobalde de Courville, but through envy, as it is said, the design failed. Merennus in Quest. et Exple. in Genesim. art. XV. pag. 1663. Walth. *Musicalisches Lexicon*, voce *ACADEMIE ROYALE DE MUSIQUE*.

* Vide infra, page 20.

† As an instance of their superior skill in the science of medicine, he says that their physicians pretend that they are able, not only to tell by the pulse how many hours or days a sick man can last, but how many years a man in perfect seeming health may live, in case of no accident or violence. *Essay of Heroic Virtue*, sect. II.

The following summary of Chinese knowledge may serve to shew how well they are entitled to the exaggerated encomiums of such writers. They carry their history back to many ages before the time of the creation. Hearne's *Duct. Historic*, vol. I. page 16. Their notion of an eclipse is, that there is in heaven a dragon of an immense bigness, ready at all times to eat up the sun or moon, which he likes best; when

The topics insisted on by Sir William Temple, in that part of his *Essay on Heroic Virtue*, where he takes occasion to speak of the Chinese, are their wisdom, their knowledge, their wit, their learning, ingenuity, and civility, on which he bestows the most extravagant encomiums.

Vossius is more particular, and says that 'the Chinese deplore the loss of their music, the superior merit whereof may be inferred from the relics of it yet remaining, which are so excellent, that for their perfection in the art, the Chinese may impose silence on all Europe.' Farther he says of their pantomimes, or theatrical representations by mute persons, in which the sentiments are expressed by gesticulations, and even nods, that 'these declare their skill in the rythmus, which is the soul of music.' Elsewhere he takes occasion to celebrate this people for their skill on the tibia, and bestows on their performance the following enthusiastic encomium: 'The tibia, by far to be preferred to the stringed instruments of every kind, is now silenced, so that, excepting the Chinese, who alone excel on it, scarce any are to be found that are able to please even an ordinary hearer.'‡

Another writer is more particular, and gives us for history this nonsense; that Fou-Hi, the first of the emperors and legislators of China, delivered the precepts of music, and having invented fishing, composed a song for those who exercised the art; and to banish all impurity from the heart, made a lyre with strings of silk: and farther that Chin-Nong, a succeeding emperor, celebrated the fertility of the earth in songs of his own composing, and made a beautiful lyre and a guitar enriched with precious stones, which produced a noble harmony, curbed the passions, and elevated many to virtue and heavenly truth.¶

These are the opinions of men who have acquired no small reputation in the world of letters; and therefore that error might not derive a sanction from authority, it seemed necessary to enquire into the evidence in support of them; of what sort it is, the passage above cited may serve to show. It remains now to make the comparison above proposed of the modern with the ancient music.

The method hitherto pursued by those writers who have attempted to draw a parallel between the ancient and modern music, has been to bring together into one point of view the testimonies in favour of the former, and to strengthen them by their own suffrages, which upon examination will be found to amount to just nothing; for these testimonies being no more than verbal declarations or descriptions, every reader is at liberty to supply them by ideas of his own; ideas which can only have been excited by that music which he has actually heard,

an eclipse of either happens, they suppose he has got the planet between his teeth, and, to make him quit his hold, they beat drums and brass kettles. *Le Comte's Memoirs of China*, edit. 1738, page 70, 488. In the judgment of Cassini, and other great astronomers, they err in their accounts of sundry conjunctions of the planets; in some of them not less than five hundred years. Jenkin on the Reasonableness and Certainty of the Christian Religion, vol. I. page 230. They are so little skilled in mechanics, that they took a watch, brought into their country by a Jesuit, for an animal. They are strangers to the use of letters as the elements of words; and have even at this day no alphabet. *Ibid*. Moreover they pretend to be the inventors of music, notwithstanding that in the opinion of Father Le Comte they have nothing among them that deserves the name. See his *Memoirs*, page 214.

Of their propensity to fraud and deceit in their dealings, there are abundant examples in *Le Comte* and *Lord Anson's voyage*; and of their morality and civil policy, which are so highly extolled, any one may judge, when he is told that in Peking and other large cities there is an officer, whose duty it is every morning to destroy the numerous infants that have been exposed in the streets in the preceding night. *Mod. Univ. Hist. fol. vol. I. page 175*.

‡ De poemat. cant. et virib. Rythmi, page 98.

¶ *Ibid*, page 107.

§ *Extraits des Hist. Chinoises*, published by Mons. Goguet, page 567, 572. *Dissert. on the Union, &c. of Poetry and Music*, page 167.

or at least perused and contemplated. An instance borrowed from the practice of some critics in painting, may possibly illustrate this sentiment: the works of Apelles, Parrhasius, Zeuxis, and Protogenes, together with those of other artists less known, such as Bularchus, Euphranor, Timanthes, Polygnotus, Polycletes, and Aristides, all famous painters, have been celebrated in terms of high applause by Aristotle, Philostratus, Pliny, and the poets; and those who attend to their descriptions of them, associate to each subject ideas of excellence as perfect as their imaginations can suggest, which can only be derived from such works of later artists as they have seen; in like manner as we assist the descriptions of Helen in Homer, and of Eve in Milton, with ideas of female beauty, grace, and elegance, drawn from our own observation: the result of such a comparison in the case of painting, has frequently been a determination to the prejudice of modern artists; and the works of Raphael, Domenichino, and Guido have been condemned as not answering to those characters of sublime and beautiful, which are given to the productions of the ancient artists.† In like manner to speak of music, we can form ideas of the perfection of harmony and melody, and of the general effect resulting from the artful combination of musical sounds, from that music alone which we have actually heard; and when we read of the music of Timotheus or Antigenides, we must either resemble it to that of the most excellent of the modern artists, or forbear to judge about it; and if in the comparison such critics as Isaac Vossius, Sir William Temple, and some others, reject the music of the moderns as unworthy of attention or notice, how egregiously are they deceived, and what do they but forego the substance for the shadow?

Other writers have taken a different course, and endeavoured to prove the inferiority of the modern music to the ancient, by a comparison of the powers of each in depriving men of the exercise of their rational faculties, and by impelling them to acts of violence. To these it may be said, that, admitting such a power in music, it seems to be common in some degree to that of all ages and countries, even the most savage; but the fact is, that these effects are adventitious, and in all the instances produced will be found to have followed from some predisposition of the mind of the hearer, or peculiar coincidence of circumstances, for that in truth music pretends not to the power of working miracles, nor is it the more to be esteemed for exciting men to frenzy. Those who contemplate it in a philosophical and rational manner, and attend to its genuine operation on the human affections, are abundantly satisfied of its efficacy, when they discover that it has a tendency to exhilarate the mind, to calm the passions, to assuage the pangs of affliction,‡ to

assist devotion, and to inspire the mind with the most noble and exalted sentiments.

Others, despairing of the evidence of facts, have recourse to argument, contending that the same superiority with respect to music is to be yielded to the ancients as we allow them in the arts that afford delight to the imagination; poetry, eloquence, and sculpture, for instance, of which, say they, their works bear luculent testimony. To this it may be answered, that the evidence of works or productions now existing is irrefragable, but in a question of this kind there is no reasoning by analogy; and farther, that in the case of music, proof of the superiority of the ancients is not only wanting, but the weight of the argument lies on the other side; for where are those productions of the ancients that must decide the question? Lost, it will be said, in the general wreck of literature and the arts. If so, they cease to be evidence. Appeal we then to those remaining monuments that exhibit to us the forms of their instruments, of which the lyre and the tibia are the most celebrated; and that these are greatly excelled by the instruments of the moderns will not bear a question. As to the lyre, considered as a musical instrument, it is a very artless invention, consisting merely of a few chords of equal length but unequal tensions, in such a situation, and so disposed, as, without any contrivance, to prolong or reverberate the sound, to vibrate in the empty air. The tibia, allowing it the perfection to which the flute of the moderns is arrived, could at best be but an imperfect instrument;§ and yet we are told it was in such estimation among the ancients, that at Corinth the sum of three, some say seven, talents was given by Ismenias, a musician, for a flute.

But a weightier argument in favour of modern music, at least so far as regards the improvements in theory and practice that necessarily result from the investigation of new principles and the discovery of new combinations, may be drawn from the natural course and order of things, which is ever towards perfection, as is seen in other sciences, physics and mathematics, for instance; so that of music it may be said, that the discoveries of one age have served but as a foundation for improvements in the next; the consequence whereof is, that the fund of harmony is ever increasing. What advantages must accrue to music from this circumstance, may be discerned if we inquire a little into those powers which are chiefly exercised in practical composition. The art of invention is made one of the heads among the precepts of rhetoric, to which music in this and sundry instances bears a near

this answer: 'Quod mihi consilium dedisti, magnam habeo tibi gratiam, ut etiam hosti injusto serviam; id verò mihi intolerandum videtur. 'Si Deus faveret, repetere, pœnas ab eo vellem, qui à me nunquam nec factò violatus nec verbo, bello, cuius nulla est causa legitima, prætextum præbuit, meque in hunc statum redegit, accitò, nescio unde, immisceoque Belisario. Non improbabile esse sciat, passurum ipsum, tanquam hominem ac principem, eorum aliquid, unde abhorrit. Nequit ultra progredi stylus, auferente mentem calamitate, quæ me circumvenit. Vale, amice Pharas, et mihi quod to oro, citharam, panem unum ac spongiam mitte.' Procopius Cæsariensis de Bello Vandalico, vol. I. lib. II. cap. vi. page 240, edit. Paris, 1662, which we thus render: I esteem it a great kindness that you vouchsafe me your advice, recommending a submission to my enemy, unjust as he has been to me, but the thought thereof is intolerable. If it please God I am prepared to suffer the worst from him, who having never been injured by me, has found a pretext for a war, for which no justifiable reason can be assigned; and has let loose upon me Belisarius, who has reduced me to this extremity. Let him know that he is a man, and, though a prince, that he is not beyond the reach of misfortune. I can proceed no farther, the calamities which surround me depriving me of my reason. Farewell my friend Pharas, and send me a harp, a loaf of bread, and a sponge. The historian adds, that the harp was to console him in his affliction, the loaf to satisfy his hunger, he not having seen bread for a long time, and the sponge to dry up his tears.

§ The imperfection of the flute consists in the impossibility of attemping its tones, there being no rule or canon by which it can be tuned; to which we may add, that the tones in the upper octave are as dissimilar, in respect of sound, as those of the human voice in those persons who have what is called the falsetto. In the flute also the difference is discernible in the double shake, which is made on a note that divides the two systems of the natural and artificial tones.

* Mr. Harris to this purpose has given his sentiments in the following judicious observation: 'When we read in Milton of Eve, that

'Grace was in all her steps, heav'n in her eye,

'In ev'ry gesture dignity and love;

'we have an image not of that Eve which Milton conceived, but of such an Eve only as every one by his own proper genius is able to represent from reflecting on those ideas which he has annexed to those several sounds. The greater part in the mean time have never perhaps bestowed one accurate thought upon what Grace, Heaven, Love, and Dignity mean; or ever enriched the mind with ideas of beauty, or asked whence they are to be acquired, and by what proportions they are constituted. On the contrary, when we view Eve as painted by an able painter, we labour under no such difficulty; because we have exhibited before us the better conceptions of an artist, the genuine ideas of perhaps a Titian or a Raphael.' Disc. on Music, Painting, and Poetry, page 77, in not.

† Vide Inquiry into the Beauties of Painting, by Daniel Webb, Esq. passim.

‡ To this purpose we meet in Procopius with the following affecting relation, viz: that Gellimer, king of the Vandals, being at war with the emperor Justinian, and having been driven to the mountains by Belisarius, his general, and reduced to great straits, was advised in a letter by a friend of his named Pharas to make terms with the enemy; but in the greatness of his spirit disdaining submission, he returned

resemblance; the end of persuasion, or affecting the passions, being common to both. This faculty consists in the enumeration of common places, which are revolved over in the mind, and requires both an ample store of knowledge in the subject upon which it is exercised, and a power of applying that knowledge as occasion may require. It differs from memory in this respect, that whereas memory does but recall to the mind the images or remembrance of things as they were first perceived, the faculty of invention divides complex ideas into those whereof they are composed, and recommends them again after different fashions, thereby creating variety of new objects and conceptions. Now, the greater the fund of knowledge above spoken of is, the greater is the source from whence the invention of the artist or composer is supplied; and the benefits thereof are seen in new combinations and phrases, capable of variety and permutation without end. And thus much must serve at present touching the comparative merits of the ancient and modern music.

In tracing the progress of music, it will be observed, that it naturally divides itself into the two branches of speculation and practice, and that each of these requires a distinct and separate consideration.* Of the dignity and importance of the former, Ptolemy, lib. I. cap. ii. has delivered his sentiments to the following purpose: 'It is in all things the business of contemplation and science to show that the works of nature, well regulated as they are, were constituted according to reason, and to answer some end; and that nothing has been done by her without consideration, or as it were by chance; more especially in those that are deemed the finest of her works, as participating of reason in the greatest degree, the senses of sight and hearing.' And Sir Isaac Newton, speaking of the examination of those ratios that afford pleasure to the eye in architectural designs, says it tends to exemplify the simplicity in all the works of the Creator. And farther he gives it as his opinion, 'that some general laws of the Creator prevail with respect to the agreeable or displeasing affections of all our senses.'† By practical music we are to understand the art of composition as founded in the laws of harmony, and deriving its grace, elegance, and power of affecting the passions from the genius and invention of the artist or composer; in the exercise of which faculty it may be observed, that the precepts for combining and associating sounds are as it were the syntax of his art, and are drawn out of it, as the rules of grammar are from speech.‡

In musical history the several events most worthy of attention seem to be those of the first establishment of a system, the introduction of music into the church service, the rise of dramatic music; under these several heads all that intelligence which to us is the most interesting may be comprehended. As touching the first, it is certain that we owe it to the Greeks, and there is nothing that at this distance of time can be superadded to the relations of the ancient writers on the subject; nor can it be safe to deviate, either in respect of form or manner, from the ac-

* There are but few instances of musicians that have been eminently distinguished for skill both in the theory and practice of music, Zarlino, Tartini, and Rameau excepted. The two branches of the science have certainly no connection with each other, as may be gathered from the following sentiment of an ingenious writer on the subject: 'The delights of practical music enter the ear without acquainting the understanding from what proportions they arise, or even so much as that proportion is the cause of them: this the philosopher observes from reason and experience, and the mechanic must be taught, for the framing instruments; but the practitioner has no necessity to study, except he desires the learning as well as the pleasure of his art.' Proposal to perform Music in perfect and mathematical Proportions, by Tho. Salmon, 4to. Lond. 1688.

† Vide infra. page 410, in note.

‡ The art by which language should be regulated, viz. Grammar, is of much later invention than languages themselves, being adapted to what was already in being, rather than the rule of making it so." Bishop Wilkins's Essay towards a real Character, page 19.

counts from them transmitted to us of the original constitution of the lyre, or of the invention and successive progress of a musical scale; much less can we be warranted in speaking of the ancient practice, and the more abstruse parts of the science, namely, the genera and the modes, in any other terms than themselves make use of. Were a liberty to do otherwise allowed, the same mischief would follow that attends the multiplication of the copies of a manuscript, or a translation through the medium of divers languages, where a new sense may be imposed upon the text by different transcribers and translators in succession, till the meaning of the original becomes totally obscured.

Vitruvius, in his treatise *De Architectura*, has a chapter on music, wherein he laments the want of words in the Roman language equivalent to the Greek musical terms; the same difficulty is experienced in a greater or less degree by all who take occasion to speak of the ancient music, whether of the Hebrews or the Greeks. The English translators of the Bible were necessitated to render the words כִּנּוֹר Kinnor and גִּטָּר Gnugab, by harp and organ; and a translator of musical appellatives will in many instances be reduced to as great difficulty as the Laplander, who in rendering a passage in the Canticles, 'He looketh forth at the windows, shewing himself at the lattice,' could find no nearer a resemblance to a lattice than a snow-shoe, a thing like a racket used in the game of tennis, and translated it accordingly.

The complaint of Vitruvius above mentioned furnishes an occasion of enquiry into the state of music among the Romans; and this will appear, even in their most flourishing condition, to have been, both in theory and practice, very low, there being no author to be found till after the destruction of the commonwealth who has written on the subject; and of those that lived in the time of Augustus and afterwards, the number is so small, and, if we except Boetius, their writings are so inconsiderable, as scarce to deserve notice. Vitruvius wrote not professedly on music; all that he says of it is contained in the third, fourth, and fifth chapters of the third book of his treatise *De Architectura*; wherein laying down the rules for the construction of theatres, he speaks of harmony in general terms, and afterwards of certain hollow vessels disposed in niches for the purpose of reverberating the voice of the singers or actors; and thence takes occasion to mention the genera of the ancients, which he illustrates by a scale or diagram, composed, as he says, by Aristoxenus himself, though it does not occur in the valuable edition of that author published by Meibomius. In the same work, lib. X. cap. ii. entitled *De Hydraulicis*, he describes the hydraulic organ of the ancients, but in such terms, that no one has been able satisfactorily to ascertain either its figure or the use of its parts.

Of Censorinus, Macrobius, Martianus Cappella, and Cassiodorus, it was never pretended that they had made any new discoveries, or contributed in the least to the improvement of music. Boetius indeed with great industry and judgment, collected the sense of the ancient Greek writers on Harmonics, and from the several works of Aristoxenus, Euclid, Nicomachus, Alypius, Ptolemy, and others whose discourses are now lost, compiled his most excellent treatise *De Musica*. In this he delivers the doctrines of the author above mentioned, illustrated by numerical calculations and diagrams of his own invention; therein manifesting a thorough knowledge of the subject. Hence, and because of his great accuracy and precision, this work of Boetius, notwithstanding it contains little that can be said to be new, has ever been looked upon as a valuable repository of musical erudition.§

§ The works of Boetius were published in a folio volume at Venice, in the year 1499, and at Basil by Giareanus, in 1570. In the treatise *De Musica* are sundry diagrams invented by the editor, which tend greatly to the illustration of his author.

Long before the time of Boetius, the enarmonic and chromatic genera had grown into disuse; the diatonic genus only remaining, the musical characters were greatly reduced in number; and the notation of music became so simple, that the Romans were able to represent the whole series of sounds contained in the system of a double octave, or the bisdiapason, by fifteen characters; rejecting therefore the characters used by the Greeks for the purpose, they assumed the first fifteen letters of their own alphabet; and this is the only improvement or innovation in music that we know of that can be ascribed to the Romans.

As to the practice of music, it seems to have been carried to no very great degree of perfection by the Romans; the tibia and the lyre seem to have been the only instruments in use among them; and on these there were no performers of such distinguished merit as to render them worthy the notice of posterity, which perhaps is the reason that the names of but few of them are recorded.

Caspar Bartholinus has written a treatise *'De Tibiis veterum et earum antiquo usu,'* in which he has brought together a great variety of intelligence respecting the flutes of the ancients: in this tract is a chapter entitled *'Tibia in Ludis Spectaculis atque Comediis,'* wherein the author takes occasion to speak of the *tibiæ pares et impares*, and also of the *tibiæ dextræ et sinistræ*, used in the representation of the comedies of Terence, which he illustrates by plates representing the forms of them severally, as also the manner of inflating them, taken from coins and other authentic memorials. In particular he gives an engraving from a manuscript in the Vatican library, of a scene in an ancient comedy, in which a tibicinist is delineated standing on the stage, and blowing on two equal flutes: what relation his music has to the action we are to seek. He also gives from a marble at Rome the figure of a man with an inflected horn near him, thus inscribed, *M. IULIUS VICTOR EX COLLEGIO LITICINUM CORNICINUM.*

It appears from a passage in Valerius Maximus, that there was at Rome a college of tibicinists or players on the flute, who we may suppose were favoured with some special privileges and immunities. These seem to have been a distinct order of musicians from the former, at least there are sundry inscriptions in Gruter purporting that there was at Rome a college comprehending both tibicinists and fidicinists: which latter seem to have been no other than lyrists, a kind of musicians of less account among the Romans than the players on their favourite instrument the flute. Valerius Maximus, lib. II. cap. v. relates of the tibicinists that they were wont to play on their instrument in the forum, with their heads covered, and in party-coloured garments.

That the tibicinists were greatly indulged by the Romans, may be inferred from the nature of their office, which required their attendance at triumphs, at sacrifices, and indeed all public solemnities; at least the sense of their importance and usefulness to the state is the only reason that can be suggested for their intemperance, and that insolence for which they were remarkable, and which both Livy and Valerius Maximus have recorded in a narration to the following purpose. 'The censors had refused to permit the tibicines to eat in the temple of Jupiter, a privilege which they claimed as founded on ancient custom; whereupon the tibicines withdrew to Tibur, a town in the neighbourhood of Rome, now Tivoli. As the tibicines were necessary attendants on the sacrifices, the magistrates were at a loss how to perform those solemnities in their absence; the senate therefore sent ambassadors to the Tiburtines, requesting them to deliver them up as officers of the state who had

fled from their duty: at first persuasions were tried, but these proving ineffectual, the Tiburtines had recourse to stratagem; they appointed a public feast, and inviting the tibicines to assist at it, plied them with wine till they became intoxicated, and, while they were asleep, put them into carts, which conveyed them to Rome. The next day, having in some degree recovered their reason, the tibicines were prevailed on to stay in the city, and were not only restored to the privilege of eating in the temple, but were permitted annually to celebrate the day of their return, though attended with circumstances so infamous to their office, by processions in which the most licentious excesses were allowed.'

The secession of the tibicinists was in the consulate of Caius Junius Bubulcus and Quintus Æmilius Barbula: that is to say in the year of the world 3640, three hundred and eight years before Christ; and serves to shew the extreme licentiousness of Roman manners at that period, as also the low state of their music, when the best instruments they could find to celebrate the praises of their deities were a few sorry pipes, little better than those which now serve as playthings for children.

But, leaving the tibicines and their pipes to their admirers, if we proceed to enquire into the state of music among the Romans at any given period of their history, we shall find that, as a science, they held it in small estimation. And to this fact Cornelius Nepos bears the fullest testimony; for, relating in his life of Epaminondas that he could dance, play on the harp and flute, he adds, that in Greece these accomplishments were greatly esteemed, but by the Romans they were little regarded. And Cicero, in his *Tusculan Questions*, lib. I. cap. i. to the same purpose, observes that the ancient Romans, addicting themselves to the study of ethics and politics, left music and the politer arts to the Greeks. Farther we may venture to assert, that neither their religious solemnities, nor their triumphs, their shows or theatrical representations, splendid as they were, contributed in the least to the improvement of music either in theory or practice: to say the truth, they seemed scarcely to have considered it as a subject of speculation; and it was not until it received a sanction from the primitive fathers of the church, that the science began to recover its ancient dignity.

The introduction of music into the service of the church affords ample scope for reflection, and comprehends in its history a great part of what we know of modern music. All that need be mentioned in this place respecting that important event is, that after the example of the Jews, and upon the authority of sundry passages in scripture, and more especially in compliance with the exhortation of St. Paul in his Epistles, St. Basil, St. Ambrose, and St. Chrysostom about the middle of the fourth century instituted antiphonal singing in their respective churches of Cesarea in Cappadocia, Milan, and Constantinople. St. Ambrose, who must be supposed to have been eminently skilled in the science, prescribed a formula of singing in a series of melodies called the ecclesiastical tones, apparently borrowed from the modes of the ancient Greeks; these, as constituted by him, were in number only four, and are meant when we speak of the *Cantus Ambrosianus*; but St. Gregory, near two centuries after, increased them to eight. The same father drew up a number of precepts respecting the limits of the melodies, the fundamental note, and the succession of tones and semitones in each; and, with a view to the establishment of a settled and uniform musical science, that would apply to all the several offices at that time used in divine worship, founded and endowed a school for the instruction of youth in the

* Livy, lib. IX. cap. xxx. See also Valerius Maximus, lib. II. cap. v. The same story is related by Ovid, *Fasts*, lib. VI., who adds that the thirteenth day of June was celebrated as the anniversary.

rudiments of music, as contained in this formula, which was distinguished by the appellation of the *Cantus Ecclesiasticus*, and in later times by that of the *Cantus Gregorianus*.

Before this time music had ceased to be a subject of speculation: Ptolemy was the last of the philosophers that had written professedly on it; and though it may be said that his three books of *Harmonics*, as also those of *Aristoxenus*, *Euclid*, *Nichomachus*, *Aristides Quintilianus*, and others, being extant, music was in a way of improvement from the studies of men no less disposed to think and reflect than themselves; yet the fact is, that among the Romans the science not only had made no progress at all, but even before the dissolution of the commonwealth, with them it seemed to be extinct. Nor let the supposition be thought groundless, that during some of the succeeding ages the books, the very repositories of what we call musical science, might be lost; the history of the lower empire furnishing an instance, the more remarkable, as it relates to their own, the Roman civil law, which proves at least the possibility of such a misfortune.*

To these causes, and the zeal of the fathers above mentioned, and more especially of St. Gregory, to disseminate its precepts, it is to be ascribed that the cultivation of music became the peculiar care of the clergy. But here a distinction is to be noted between the study and practice of the science; for we find that at the time of the institution of the *Cantus Ambrosianus*, an order of clergy was also established, whose employment it was to perform such parts of the service as were required to be sung. These were called *Psalmists*; and though by *Bellarmino* and a few other writers they are confounded with the *Lectors*, yet were they by the canonists accounted a separate and distinct order. The reason for their institution was, that whereas in the apostolical age the whole congregation sang in divine service, and great confusion and disorder followed therefrom, it was found necessary to settle what the church calls a regular and decent song, which, as it was framed by rule, and founded in the principles of harmony, required skill in the performance; and accordingly we find a canon of the council of *Laodicea* held as early as the beginning of the fourth century, forbidding all except the canonical singers, that is to say, those who were stationed in the *Ambo*, where the singing-deak was placed, and who sang out of a book or parchment, to join in the psalms, hymns, and other parts of musical divine service. We may well suppose that this order of men were endowed with all the requisites for the discharge of their function, and that the peculiar form which the council of *Carthage* directs to be used for the ordination of *Psalmists* or singers,† was in effect a recognition of their skill and abilities.

The order of men above mentioned can be considered in no other view than as mere practical musicians, the principal object of whose attention was to make themselves acquainted with the songs of the church, and to utter them with that decency and gravity, and in such a manner as tended most to edification. From the frequent repetition of the same offices it must be supposed that in general they sang by rote; at least we have no better reason to assign than that they must have so done, for the establishment of a school by St. Gregory for the instruction of youth in the *Cantus Ecclesiasticus*, as reformed by himself, and for that sedulous attention to their improvement in it which he manifested in sundry instances.

At the same time that we applaud the zeal of this father of the church, we cannot but wonder at that of his predecessors, which is not more apparent in their com-

mendations of music, as associated with religious worship, than in their severe censures of that which was calculated for private recreation. As to the songs of the stage in the ages immediately succeeding the Christian era, we know little more of them than in general that they were suited to the corrupt manners of the times; and these, by reason of their lewdness, and perhaps impiety of sentiment, might be a just subject of reprehension; but against the music, the sounds to which they were uttered, or the particular instruments that assisted the voice in singing them, an objection can scarce be thought of; and yet so frequent and so bitter are the invectives of the primitive fathers, namely, *Clemens Alexandrinus*, *Tertullian*, *St. Cyprian*, *Lactantius*, *Epiphanius*, *Gregory Nazianzen*, and of *St. Basil*, *St. Augustine*, and *St. Chrysostom*, who were lovers and promoters of the practice of music, against wicked measures and effeminate melodies, the noise of flutes, cymbals, harps, and other instruments of deceit, seducing the hearers to intemperance, and even idolatry, that if credit be given to their opinions of the nature and tendency of secular music, we must be inclined to believe, as they in good earnest profess to have done, that it was an invention of the Devil.

The cultivation of music as a science was the employment of a set of men, in whom all the learning of the times may then be said to have centered; these were the regular clergy, of such of whom as flourished in the eleventh century afterwards, it must in justice be said, that what they wanted in knowledge, they made up in industry; and that those frequent barbarisms which occur in their writings, were in no small degree atoned for by the clearness and precision † with which on every occasion they delivered their sentiments. Nor was the conciseness and method of the monkish treatises on music a less recommendation of them than their perspicuity: they consisted either of such maxims as were deemed of greatest importance in the study of the science, or of familiar colloquies between a master and his disciple, in which in an orderly course of gradation, first the elements, and then the precepts of the art were delivered and illustrated. To enumerate the instances of this kind which have occurred in the course of this work, would be an endless task; let it suffice to say that the *Histoire Littéraire de France*, and the *Memoirs of Bale*, *Pits*, and the *Bibliotheca* of *Tanner* abound with references to a variety of manuscript tracts deposited in the public and other libraries, that abundantly prove the mode of musical instruction to have been such as is above described.

Before the period above spoken of, music had for very good reasons been admitted into the number of the liberal sciences; and accordingly in the scholastic division of the arts into the trivium and quadrivium, it held a place in the latter: nevertheless, till the Greek literature began to revive in Europe, saving the summary of harmonics contained in the treatise *De Musica* of *Boetius*, the students in that faculty had scarce any source of intelligence; and to this it must be attributed that in none of the many tracts written by the monks of those times, and afterwards by the professors or scholastics as they were called, do we meet with any of those profound disquisitions on harmony and the proportions which resolve the principles of music into geometry: nor any of those nice calculations and comparisons of ratios, or subtle distinctions between the consonances of one kind and those of another, which abound in the writings of the ancient Greeks; so that were we to judge from the many

† These qualities seem to be but the necessary result of the old scholastic method of institution, in which logic made a considerable part, and are in no instance more manifest than in the ancient forms of judicial proceedings, such as writs and pleadings; of which Sir Matthew Hale, in his *History of the law*, chap. 7, remarks that they were very short, but very clear and conspicuous, orderly digested, pithy, clear, and rational. The same may be said in general of the more ancient statutes.

* See the relation of the discovery of the *Litæ Pisana* at page 180.

† See page 106, in note.

discourses written during that dark period, and bearing the titles of *Micrologus*, *Metrologus*, and others of the like import, we should conclude that the science of harmonics had scarce any existence among mankind. Nor could any great advantage result from the writings of Boetius, seeing that there wanted light to read by; and this was not obtained till Franchinus introduced it, by procuring translations of those authors from whose writings Boetius had compiled his work.

That the studies of the monkish musicians must have been confined to the *Cantus Gregorianus* is evident from this consideration, that they were strangers to music of every other kind; an assertion which will be the more readily credited when we are told that till the middle of the eleventh century rhythmic or mensurable music was not known. Their method of teaching it was by the monochord, without which they had no method of determining the progression of tones and semitones in the octave, nor consequently of measuring by the voice any of the intervals contained in it.

The reformation of the scale by Guido Aretinus, and more especially his invention of a method of singing by certain syllables adapted to the notes, facilitated the practice of singing to such a degree, that, as himself relates, the boys of his monastery were rendered capable in a month's time of singing in a regular and orderly succession the several intervals with the utmost accuracy and precision.* We are told, though not by himself, that he also by an ingenious contrivance transferred the notes of his scale to the left hand, making a several joint of each of the fingers the position of a note. Whether this invention is to be ascribed to him or not, it is pretty certain that it followed soon after the reformation of the scale, and that it gave rise to a distinction of music into manual and tonal, the first comprehending the precepts of singing by the syllables, the other the *Cantus Ecclesiasticus*, as instituted in the formula of St. Gregory.

At this time the world were strangers to what we call rhythmic music, the practice of singing, and thereby of associating music with poetry, which till then had universally prevailed, rendering any such invention unnecessary. Nevertheless, there were some writers who had entertained an idea of transferring the prosody of poetry to music; and a few scattered hints of this kind, which occur in the writings of St. Augustine and our countryman Bede on the subject of metre, suggested the formation of a system of metrical laws, such as would not only enable music to subsist of itself, but aid the powers of melody with that force and energy which it is observed to derive from the regular commixture and interchange of long and short quantities.

This improvement was effected in the institution of what is called the *Cantus Mensurabilis*; a branch of musical science which subjected the duration of musical sounds to rule and measure, by assigning to those of the slowest progression certain given portions of time, and to the next in succession a less, in a regular gradation, and which taught a method of signifying by characters, varying in form and colour, the radical notes, with their several ramifications, terminating in those of the smallest value, *i. e.* of the shortest duration.

An invention of this kind was all that could then be thought wanting to the perfection of instrumental music; and from this period we may observe that it began to flourish: it is true that the state of the mechanic arts was then very low, and that the instruments in common use were so rudely constructed, as to be scarcely capable of yielding musical sounds. Bartholomeus, in his book *De Proprietatibus Rerum*, in an enumeration of the musical instruments of his time, has described the flute as made of the boughs of an elder-tree hollowed; and an instrument

called the *Symphonia*, as made of a hollow tree, closed in leather on either side, which he says is beaten of minstrels with sticks, and that 'by accord of hygge and lowe thereof comyth full swete notes.' And again, describing the *Psalterium* or Sawtrie, he says it differs from the harp, for that it is made of an hollow tree, and that 'the sowne comyth upward, the strynges being smytte downwarde; whereas in the harpe the hollownesse of the tre is byneathe.' These descriptions, and others of the like kind which are elsewhere to be met with, are evidence of the inartificial construction of musical instruments in those days, and leave it a question what kind of harp or other instrument that could be on which King Alfred had attained to such a degree of excellence as to rival the musicians of his time.

Nevertheless it appears that there were certain instruments, perhaps not in common use, better calculated to produce melody than those above-mentioned, namely, those of the viol kind; the specific difference between which and other stringed instruments is, that in the former the sound is produced by the action of a plectrum or bow of hair on the strings: of these the mention is not only express, but frequent in Chaucer, by the names of the *Fithel*, *Getron*, *Ribible*, and other appellations, clearly synonymous: the invention of this class of instruments is by some, who make the viol the prototype of it, ascribed to the French; but there are other writers who derive the viol itself from the Arabian *Rebab*, from whence perhaps *Ribible* and *Rebec*, the use whereof it is said the Christians learned from the Saracens in the time of the Crusades; but it is more probable, by reason of its antiquity, that it was brought into Spain by the Moors.

To ascertain the degree of perfection to which the practice of instrumental music had attained at any period before the sixteenth century, would be very difficult. The Provençal songs, as being mere vocal compositions, afford no ground on which a conjecture might be formed: and as to their popular tunes, the airs of the *Musars* and *Violers*, besides that they seem to have been mere melodies, for the most part the effusions of fancy, and not regulated by harmonical precepts, the impression of them can hardly be supposed to have been either deep or lasting, and this may be the chief reason that the knowledge of them has not reached posterity.

That the practice of instrumental music was become familiar with such persons of both sexes as had received the benefit of a good education, is clearly intimated by the old poets. Not only the Squire, but the Clerk, Absolon, in Chaucer, are by him described, the one as floyting, *i. e.* fluting all the day, the other as playing songs on a small *Ribible*, and elsewhere on the *Geterne*;† and in the *Confessio Amantis* of Gower, fol. 178, b. is a plain intimation that the *Citole*, an instrument nearly resembling the virginal, was in his time the recreation of well educated young women.‡

We are also told by Boccace, in his Account of the Plague at Florence in 1348, that the ladies and gentlemen who retired from that city, and are relators of the several stories contained in his *Decameron*, among other recreations in the intervals of their discourses, intermixed music; and that sundry of the persons whose names he mentions played on the lute and the viol. They also danced to the music of the *Cornamusa* or bagpipe, an instrument which we may infer to have been held in but ordinary estimation from this circumstance, that it is put into the hands of Tindarus, a domestic of one of the ladies; besides that Chaucer in characterising his Miller says,

'A baggepipe well couth he blowe and soun.'

† See the character of the Squire among the Prologues to the *Canterbury Tales*, as also the Miller's Tale *passim*.

‡ Vide *infra*, page 206.

* Vide *infra*, page 164.

Of vocal concerts, as they stood about the year 1550, or perhaps earlier, a judgment may be formed from the madrigals of that time, which abound with all the graces of harmony. Concerts of instruments alone seem to be of later invention, at least there is no clear evidence of the form in which they existed, other than treatises and compositions for concerts of viols called *Fantasias*, few whereof were published till thirty years after.*

Gio. Maria Artusi, an ecclesiastic of Bologna, and a writer on music about the year 1600, describes the concerts of his time as abounding in sweetness of harmony, and consisting of cornets, trumpets, violins, viols, harps, lutes, flutes, and harpsichords: these, as also organs, regals, and guitars, are enumerated in the catalogue of instruments prefixed to the opera, *L'Orfeo*, composed by Claudio Monteverde, and represented at Mantua in 1607. Tom Coryat speaks also of a performance at Venice, chiefly of instrumental music, which he protests he would have travelled a hundred miles on foot to hear, but without any such particular description as can enable us to compare it with the concerts of more modern times.

As touching the theory of the science, it has above been said to have consisted in manual, tonal, and mensurable music, with this farther remark, that, as it was included in the very nature of their profession, and besides required some degree of literature, the great cultivators of it were the regular clergy. These men contented themselves with that small portion of knowledge which was to be attained by the perusal of Boetius, Cassiodorus, Guido, and a few others, who wrote in the Latin tongue; the little they knew they freely communicated; and it was not till the beginning of the fourteenth century that men began to suspect that the science was capable of farther improvement.

About this time Johannes De Muris improved the *Cantus Mensurabilis*, by reducing it to form and demonstrating that the measures thereof, like the ratios of the consonances, were founded in number and proportion: from the rules laid down by him in a treatise entitled *Practica Mensurabilis Cantûs*, are derived the distinctions of duple and triple proportion, as they respect the duration of sounds, with all the various modifications thereof. On this tract Prosdocimus Beldimandis wrote a commentary, and farther illustrated the doctrines contained therein in sundry discourses on the subjects of plain and mensurable music. It appears that both these persons were philosophers at large, and eminently skilled in the mathematics; and the liberal manner in which they wrote on music, treating it as a subject of deep speculation, was an inducement with many learned men, who lived under no ecclesiastical rule, to enter into an investigation of its principles. Some of these assumed the character of professors of the science, and undertook by public lectures to disseminate its principles. The more eminent of these persons were Marchettus of Padua, Johannes Tinctor, Gulielmus Garnerius, and Antonius Suarzialupus, to whom we may add Politian, whose skill in music is manifested in a discourse *De Musica*, contained in his *Panepistemon* or *Prælectiones*, extant in print. But notwithstanding the pains thus taken to revive the science, the improvement of it went on very slowly; whatever advances were made in the practice, the theoretical topics of disquisition were soon exhausted, and the science of harmonics may be said to have been for some ages at a stand.

At length the beams of learning began to dawn on the

western empire: the city of Constantinople had been the seat of literature for some ages, but the sack of it by the Turks in the year 1453, had driven a great number of learned Greeks thence, who bringing with them an immense treasure of manuscripts, took refuge in Italy. Being settled there, they opened their stores, took possession of the public schools, and became the professors and teachers of the mathematical and other sciences, and indeed of philosophy, eloquence, and literature in general, in all the great cities. Of the many valuable books of Harmonics that are known to have been written by the mathematicians and other ancient Greeks, some have escaped that fate which learning is sure to experience from the ravages of conquest,† and the contents of these being made public, the principles of the science began to be known and understood by many, who till then were scarcely sensible that it had any principles at all.

This communication of intelligence was very propitious to music, as it determined many persons to the study of the science of harmony. The tonal laws and the *Cantus Mensurabilis* were left to those whose duty it was to understand them; the ratios of sounds, and the nature of consonance were considered as essentials in music, and the investigation of these was the chief pursuit of such as were sensible of the value of that kind of learning.

Of the many who had profited in this new science, as it may be called, one was Franchinus Gaffurius, a native of Lodi, who having quitted the tuition of a Carmelite monk, who had been his instructor, became soon distinguished for skill in those theoretic principles, the knowledge whereof he had derived from an attendance on the Greek teachers. And having procured copies of the treatises on harmonics of Aristides Quintilianus, Ptolemy, Manuel Bryennius, and Bacchius senior, he caused them to be translated into Latin; and, besides discharging the duty of a public professor of music in the several cities of Italy, became the revivor of musical erudition; and that as well posterity, as those of his own time, might profit by his labours, he digested the substance of his lectures into distinct treatises, and gave them to the world.

The writings of Franchinus, as they were replete with learning drawn from the genuine source of antiquity, and contained the clearest demonstrations of the principles of harmony, were so generally studied, that music began now to assume the character of a secular profession. The precepts therein delivered afforded a greater latitude to the inventive faculty than the tonal laws allowed of; and emancipating the science from the bondage thereof, many who had no relation to the church set themselves to frame compositions for its service, in which the powers both of harmony and melody were united. And hence we may at least with a show of probability date the origin of an office that yet subsists in the choral establishments of Italy, namely, that of *Maestro di Cappella*; the duty whereof seems uniformly to have been not only that the person appointed to it should as precentor regulate the choir, but also adapt to music the offices performed both on ordinary and solemn occasions. Of the dignity and importance of the office of *Maestro di Capella* a judgment may be formed from this circumstance, that the persons elected to it for some centuries past appear to have been of distinguished eminence;‡ and of its necessity and utility no stronger argument can be offered, than that

* The earliest of which we can speak with certainty, is a treatise in folio by Thomas à Santa Maria, a Spanish Dominican, published at Valladolid in 1570, entitled '*Arte de tanner fantasia para tola, viguela, y todo instrumentado de tres o quatro ordenes*,' which carries the antiquity of concerts for Viols, and those compositions called *Fantasias*, back to that time, but leaves us at a loss as to other instrumental concerts.

† Laurus Quirinus of Venice was told by Cardinal Ruthen that upwards of one hundred and twenty thousand volumes were destroyed. Hody, de Græcis illustr. lib. II. cap. I.

‡ Andrea Adami Bolsena, in the historical preface to his '*Osservazioni per ben regolare il Coro de i Cantori della Capella Pontificia*,' asserts that anciently in the college of pontifical singers the *maestro di cappella* was a bishop.

among the Germans, to whom the knowledge of music was very soon communicated after its revival in Italy, the office was recognized by the appointment of a director of the choir in the principal churches of all the provinces and cities. The same sense of the importance of this office appears to have been entertained by the protestants, who at the time of the Reformation we find to have been no less sedulous in the cultivation of music with a view to religious worship, than the church that had established it. It is true that Calvin was for some time in doubt whether to adopt the solemn choral service, or that plain metrical psalmody which is recommended by St. Paul to the Colossians, as an incentive to such mirth as was consistent with the Christian profession, and at length determined on the latter.

But Luther, who was excellently skilled in music, considered it not merely as a relief under trouble and anxiety, but as the voice of praise, and as having a tendency to excite and encourage devout affections, besides that he had translated into the German language the *Te Deum*, and composed sundry hymns, as also tunes to some of the German psalms,* he, with the approbation of Melancthon, received into his church a solemn service, which included anthems, hymns, and certain sweet motets, of which he speaks very feelingly, and of music in general he gives his opinion in these words: '*Scimus musicam demonibus etiam invisam et intolerabilem esse.*'† That the office of a chapel-master was recognized by the protestants in the manner above mentioned is hardly to be doubted, seeing that it was exercised at Bavaria by Ludovicus Senfelius, a disciple of Henry Isaac, and an intimate friend and correspondent of Luther,‡ and subsists in Germany to this day.

For the reasons above assigned, we may without scruple attribute to Franchinus a share of that merit which is ascribed to the revivers of Literature in the fifteenth century; and the rather as his writings, and the several translations of ancient treatises on harmonics which he procured to be made, furnished the students in the science with such a copious fund of information, as enabled them not only to reason justly on its principles, but to extend the narrow bounds of harmony, and lay a foundation for those improvements which it has been the felicity of later times to experience. And it is not a groundless supposition that the reputation of his writings was a powerful incentive to the publication of those numerous discourses on music of which the ensuing work contains a detail. Indeed so general was the propensity in the professors of the science in Italy, and in Germany more especially, to the compilation of musical institutes, dialogues, and discourses in various forms, that the science was for some time rather hurt by the repetition of the same precepts, than benefited by any intelligence that could in strictness be said to be new. The writings of Zarlini and Salinas are replete with erudition; the same, though in a less eminent degree, may be said of those of Glareanus and the elder Galilei; but of the generality of the Introductions, the Enchiridions, and the *Erotomata* published in Italy and Germany from about the year 1550 to the middle of the next century, the perspicuity of them is their best praise.

* Melchior Adamus, in his life of Luther, has inserted a letter from him to Spalatinus, written anno 1534, wherein he says he is looking out for poets to translate the whole of the Psalms into the German tongue, and requests of Spalatinus his assistance therein. This was some years before Marot translated the Psalms into French.

† In an epistle to Senfelius, Musæus, cited by Dr. Wetenhall from Sethus Calvisius, in his *Gifts and Offices in the public worship of God*, page 434, but without reference to any work of Calvisius. This epistle, wherever it is, and the above cited passage, are also noticed by Butler in his *Principles of Music*, page 115. Dr. Wetenhall applies this passage to the music of our church, and on the authority thereof pronounces it to be such as no Devil can stand against.

‡ Some motets of his composition are extant in the *Dodecachordon* of Glareanus.

As the revival of the theory of music is to be ascribed to the Italians, so also are those improvements in the practice of it that have brought it to the state of perfection in which we behold it at this day. It is true that in the practice of particular instruments the masters of other countries have been eminently distinguished, as namely, those of Germany for skill on the organ; the French for the lute and harpsichord; and we are indebted for many valuable discoveries touching the nature and properties of sound, of consonance and dissonance, the method of constructing the various kinds of musical instruments, and, above all, for a nice and accurate investigation of the principles of harmonics, to the learning and industry of Mersennus, a Frenchman; but in the science of composition the musicians of Italy have uniformly been the instructors of all Europe.

To relate the subsequent instances of improvement in music, or to enumerate the many persons of distinguished eminence that have excelled in the theory and practice thereof, would be to anticipate that information, which it is the end of history to communicate; and to animadvert on the numberless defects of the ancient music, may seem unnecessary, seeing that as well the paucity as the structure of the ancient instruments affords abundant evidence of a great disproportion between their practice and their theory; it is nevertheless worthy of remark, that they who were so skilful and accurate in the invention of characters and symbols, the types not only of things, but of images or ideas, as the Greeks are allowed to have been, have, in the instance of music, manifested a great want of that faculty, inasmuch as there is not to be found in any of the characters in the ancient musical notation, the least analogy or relation between the sign and the sound or thing signified; a perfection so obvious in the practice of the moderns, that we contemplate it with astonishment, there being no possible arrangement or disposition of musical sounds, nor no series or succession of equal or unequal, similar or dissimilar measures, but may with the greatest accuracy be described by the stave of Guido, and the forms of notes with their adjuncts, as directed by the rules of the *Cantus Mensurabilis*; inasmuch that the modern system of notation, comprehending in it the types or symbols of things, and not of notions or ideas, may be said to possess all the advantages of a real character.

To celebrate formally the praises of music in a work, the design whereof is to display its excellencies, may seem unnecessary; and the rather, as it has from the infancy of the world, with historians, orators, and poets, been a subject of panegyric: besides the power and effect of musical sounds to assuage grief and awaken the mind to the enjoyment of its faculties, is acknowledged by the most intelligent of mankind; and, were it necessary, to prove that the love of music is implanted in us, and not the effect of refinement, examples thereof might be produced from the practice of those, who, from their particular situation of country, or circumstances of life, are presumed to approach nearly to that state in which the natural and genuine suggestions of the will are supposed to be most clearly discernible. To say nothing of the Turks, who are avowed enemies of literature, or of the Chinese, who, as has been shewn, notwithstanding all that is asserted of them, are so circumstanced, as seemingly never to be able to attain to any degree of excellence, nations the most savage and barbarous profess to admit music into their solemnities, such as they are, their rejoicings, their triumphs for victories, the meetings of their tribes, their feasts and their marriages; and to use it for their recreation and private solace.‡ St. Chry-

§ Father Leftau, in his *Mœurs des Sauvages*, tome II. page 213, et seq. has given a full description of the festal solemnities, accompanied with music, of the Iroquois, Hurons, and other tribes of American savages;

sotom, in his Homily on psalm xli. estimates the importance of music by its universality, and, in a strain of simplicity, corresponding with the manners of the times in which he lived, says that human nature is so delighted with canticles and poems, that by them infants at the breast when they are froward or in pain, are lulled to rest; that travellers in the heat of noon, driving their beasts, such as are occupied in rural labours, as treading or pressing grapes, or bringing home the vintage; and even mariners labouring at the oar, as also women at their distaff, deceive the time, and mitigate the severity of their labour by songs adapted to their several employments or peculiar conditions. Clearchus relates that at Lesbos the people had a song which they sung while they were grinding corn, and for that reason called *επιμόλιον*; and Thales affirms that he had heard a female slave of that country singing it, turning a mill: it began 'Mole pistrinum mole, nam et Pittacus molit rex magnæ Mitylenæ,' and alluded to the practice of that king, who was used to grind corn with a hand-mill, esteeming it a healthy exercise.

Other writers go farther, and affect to discern the principles of music not only in the songs, but the occupations and exercises of artificers and even labourers; one of these in a vein of enthusiasm, perhaps more humorous and singular than persuasive, says, 'What shall I speak of that pettee and counterfeit music which carters make with their whips, hempknockers with their beetsels, spinners with their wheels, barbers with their sizzers, smiths with their hammers? where methinks the master-smith with his treble hammer sings deskant whilest the greater buz upon the plainsong: who doth not traitwaies imagin upon musick when he hears his maids either at the woolhurdle or the milking pail? good God, what distinct intention and remission is there of their strokes? what orderly dividing of their straines? what artificial pitching of their stops?'*

and in the Royal Commentaries of Peru, book II. chap. xiv. the author, Garcilasso de la Vega, besides informing us that their fabulous songs were innumerable, and carried in them the evidence of a savage spirit, speaks thus particularly of their music: 'In musick they arrived to a certain harmony, in which the Indians of Colla did more particularly excell, having been the inventors of a certain pipe made of canes glued together, every one of which having a different note of higher and lower, in the manner of organs, made a pleasing musick by the dissonancy of sounds, the treble, tenor and base exactly corresponding and answering each to other; with these pipes they often plaid in concert, and made tolerable musick, though they wanted the quavers, semiquavers, alres, and many voices, which perfect the harmony amongst us. They had also other pipes, which were flutes with four or five stops, like the pipes of shepherds; with these they played not in consort, but singly, and tuned them to sonnets, which they composed in metre, the subject of which was love, and the passions which arise from the favours or displeasures of a mistress. These musicians were Indians trained up in that art for divertisement of the Incas, and the Curacas, who were his nobles, which, as rustical and barbarous as it was, it was not common, but acquired with great industry and study.'

Every song was set to its proper tune; for two songs of different subjects could not correspond with the same air, by reason that the music which the gallant made on his flute, was designed to express the satisfaction or discontent of his mind, which were not so intelligible perhaps by the words, as by the melancholy or cheerfulness of the tune which he plaid. A certain Spaniard one night late encountered an Indian woman in the streets of Cosco, and would have brought her back to his lodgings; but she cried out, "For God's sake, Sir, let me go, for that pipe which you hear in yonder tower calls me with great passion, and I cannot refuse the summons, for love constrains me to go, that I may be his wife, and be my husband."

The songs which they composed of their wars and grand achievements were never set to the airs of their flutes, being too grave and serious to be intermixed with the pleasures and softnesses of love; for those were only sung at their principal festivals, when they commemorated their victories or triumphs. When I came from Peru, which was in the year 1660, there were then five Indians residing at Cosco, who were great masters on the flute, and could play readily by book any tune that was laid before them; they belonged to one Juan Rodriguez, who lived at a village called Labos, not far from the city; and now at this time, being the year 1692, 'tis reported that the Indians are so well improved in musick, that it was a common thing for a man to sound divers kinds of instruments; but vocal musick was not so usual in my time, perhaps because they did not much practise their voices, though the mongrels, or such as came of a mixture of Spanish and Indian blood, had the faculty to sing with a tunable and a sweet voice.'

* The Praise of Musick, 8vo. printed anno 1586, at Oxford, for Joseph

But besides the pleasure that men derive from music, this satisfaction arises from the study of it, that its principles are founded in the very frame and constitution of the universe, and are as clearly demonstrable as mathematical truth and certainty can render them; and in this respect music may be said to have an advantage over many sciences and faculties in the pursuit whereof the attention of mankind has at different periods been deeply engaged. To say nothing of school divinity, which, happily for the world, has given place to rational theology, what can be said of law in general, other than that it is mere human invention? a fabric of science erected it is true on the basis of a few uncontroversible principles of morality, and of that which we call natural justice, but so accommodated to particular circumstances, to the genius, situation, temper, and capacities of those who are the objects of it, as that what is permitted and encouraged in one country, poligamy, for instance, shall be punished in another. In some constitutions a difference of sex shall aggravate the guilt of the same offence; and custom and usage shall preserve the inheritance of the parent for the benefit of the eldest of his male descendants with the same pretence to justice as the law of nature and reason distributes it among them all. Finally, what shall we say to that system of jurisprudence, which, being allowed to be imperfect, craves the aid of equity to regulate its operation, and mitigate its rigours? or of those glosses and comments which in the civil and canon law are of little less authority than the laws themselves?

As to medicine, setting aside the knowledge of the human frame, and the uses of its constituent parts, a noble subject of speculation it must be confessed, the wiser part of men, rejecting theory as vain and delusive, resolve the whole of the science into observation and practice; thereby confessing that its principles are either very few, or so void of certainty, as not with safety to be relied on.

Of other liberal arts, such as grammar, logic, and rhetoric, it must be allowed that they are of singular use; but, as being the mere inventions of men, and at best auxiliaries to other arts or faculties, they are in their nature subordinate, and in that respect do but resemble the art of memory, which all men know to be founded on principles not existing in nature, but assumed by ourselves; widely differing from those which are the basis as well of musical as mathematical science.

From this view of the comparative excellence of music, and its pre-eminence over many other sciences and faculties, we become convinced of the stability of its principles, and are therefore at a loss for the reasons why, in these later times at least, novelty in music should be its best recommendation; or that the love of variety should so possess the generality of hearers, as almost to leave it a question whether or no it has any principles at all.

To satisfy these doubts, it may be sufficient to observe that the principles of harmony allow, as it is fit they should, great scope for the exercise of the invention; and though few pretend to skill in the arts without being in some degree or other possessed of it, yet as all the imaginative arts presuppose a disposition in mankind to receive their impressions, all claim a right, and many the ability, to judge of works of invention and fancy.

The epic poet, trusting that the mind of his reader is co-extensive with his own, endeavours to excite in him the ideas of sublimity and beauty; the dramatic writer hopes to move the affections of his audience to terror and pity by the representation of actions, the reflection on which

Barnes, but conjectured to have been written by Dr. John Case, page 76. Of this person there is a curious account in Athen. Oxon. col. 299. Thomas Ravenscroft, in the Apologie prefixed to his discourse on the true character of music, published in 1614, cites it as a work of Dr. Case, whom he styles a 'Mæcenas of musicks.'

nspired his mind with those passions ; and the painter, giving form to those ideas of grace, greatness, and character which occupy his mind, or selecting the beauties of nature, and transferring them to canvas, or at other times contenting himself with simple imitation, in all these exercises of imagination and art, expects from the judgment of the well-informed connoisseur the approbation of his work.

Now in the several instances above adduced, notwithstanding the concessions made to them, we may discern in the generality of men the want of that sense to which the appeal is made ; for, with respect to the epic poem, few are endowed with an imagination sufficiently capacious to discover its beauties ; and as to dramatic representation, the most favourite of all public entertainments, although all men pretend to be judges of nature, and the cant of theatres has persuaded most that they are so, few are acquainted with her operations in the various instances exhibited on the stage, or know with any kind of certainty in what manner the actor is to speak, what tones or inflections of the voice are appropriated to different passions, or what are the proper gesticulations to express or accompany the sentiment which he is to utter. How many individuals among those numerous audiences, who for a series of years past have affected to admire our great dramatic poet, may we suppose capable of discerning his sense, delivered in a style of dialogue very little resembling that of the present day, or of relishing those high philosophical sentiments with which his compositions and those of Milton abound ?* The answer must be, very few. Even humour, a talent which lies level with the observation of the many, is not alike intelligible to all ; and some are disgusted with those delineations of low manners, however just and natural, that afford delight to others, as exhibiting to view the human mind in the simplicity of nature, and free from those restraints which are imposed on it by education and refinement.

The painter, in like manner, submitting his work to the public censure, shall find for one that will applaud the grandeur of the design, the fineness of the composition, or the correctness of the drawing, a hundred that would have dispensed with all these excellencies for a greater glare of colouring, and attitudes suited to their own ideas of grace and elegance.

The case is the same in sculpture and architecture ; to speak of the first :—In Roubiliac's statue of Mr. Handel at Vauxhall, few are struck with the ease and gracefulness of the attitude, the dignity of the figure, the artful disposition of the drapery, or the manly plumpness and rotundity of the limbs, but all admire how naturally the slipper depends from the left foot. In works of architecture we look for elegance joined with stability ; for symmetry, harmony of parts, and a judicious and beautiful arrangement of pleasing forms ; but to these a vulgar eye is blind ; whatever is great or massy, it rejects as heavy and clumsy. Such judges as these prefer for its lightness a Chinese to a Palladian bridge ; and are pleased with a diagonal view of the towers at the west end of St. Paul's cathedral, for the same reason as they are with a bird cage.

Finally, with respect to music, it must necessarily be, that the operation of its intrinsic powers can extend no

* The masque of Comus, written for the entertainment of a noble family, and a company of chosen spectators, which within these few years was introduced on the public stage, may seem to contradict this observation, for this reason, that although the sentiments contained in it are well known to be drawn from the Platonic, the sublimest of all philosophy ; and the imagery has an immediate and uniform reference to the fictions of mythology, it afforded great entertainment to the upper gallery ; and the performance gave rise to sundry meetings for the purpose of drinking and singing, some of which were dignified with the name of Comus's Court. Nevertheless it may be supposed that the mirth of the enchanter and his crew were more sensibly felt by the multitude than the charms of divine philosophy, which the author endeavours to display, or the reliance on divine providence, which it is the end of the poem to inculcate.

farther than to those whom nature has endowed with the faculty which it is calculated to delight ; and that a privation of that sense, which, superadded to the hearing, is ultimately affected by the harmony of musical sounds, must disable many, and, as some compute, not fewer than nine out of ten, from receiving that gratification in music which others experience. Such hearers as these are insensible of its charms, which yet they labour to persuade themselves are very powerful ; but finding little effect from them, they seek for that gratification in novelty which novelty will not afford ; and hence arises that incessant demand for variety which has induced some to imagine that music is in its very nature as mutable as fashion itself. It may be sufficient in this place to have pointed out the reasons or causes of this erroneous opinion of the nature and end of music, the effects and operation thereof will be the subject of future disquisition.

In the interim it must be confessed that there is somewhat humiliating in a discrimination of mankind, that tends to exclude the greater number of them from the enjoyment of those elegant and refined pleasures which the works of genius and invention afford ; but this condition of human nature is capable of proof, and is justified by that partial dispensation of those faculties and endowments which we are taught to consider as blessings, and which no one without impiety can censure. Seeing this to be the case, it may be asked how it comes to pass that a sense of what is true, just, elegant, and beautiful in any of the above-mentioned arts, exists as it does at this day ? or that there are any works of genius which men with one common consent profess to applaud and admire as the standards of perfection ? To this it may be answered, that although the right of private judgment is in some degree exercised by all, it is controuled by the few ; and it is the uniform testimony of men of discernment alone that stamps a character on the productions of genius, and consigns them either to oblivion or immortality.

It is beside the purpose of the present discourse to enter into a minute investigation of any particular branch of the science of which this work is the history ; what is here proposed is the communication of that intelligence which seemed but the prerequisite to the understanding of what will be hereafter said on the subject. This was the inducement to the above observations on Taste, and the motives that influence it ; and this must be the apology for a further examen, a pretty free one it may be said, of those musical entertainments, and that kind of musical performance which the public are at present most disposed to favour.

The present great source of musical delight throughout Europe is the opera, or, as the French call it, the musical tragedy, concerning which it is to be known, that, if regard be due to the opinions of some writers, who are yet no friends to this entertainment, it is a revival of the old Roman tragedy ; and it seems that the inventors of the modern recitative, Jacopo Peri and Giulio Caccini, wished to have it thought so ; forasmuch as they professed in this species of musical intonation to imitate the practice of the ancients, remarking with great accuracy the several modes of pronunciation, and the notes and accents proper to express grief, joy, and the other affections of the human mind ; but by what exemplars they regulated their imitation we are no where told : and it is to be conjectured that those general directions for pronunciation, which are to be found in many discourses on the subject of oratory, were the chief sources whence their intelligence was derived.

In what other respects the musical representations of the ancients and moderns bear a resemblance to each other it is not necessary here to enquire ; it may suffice to say of the modern opera, that by the sober and judicious

part of mankind it has ever been considered as the mere offspring of luxury; and those who have examined it with a critical eye, scruple not to pronounce that it is of all entertainments the most unnatural and absurd. To descend to particulars in proof of this assertion, would be but to repeat arguments which have already been urged, with little success it is true, but with great force of reason, aided by all the powers of wit and humour.

The principal objections against the opera are summed up by an author, who, though a professed lover of music, has shown his candour in describing the genuine effect of representations of this kind on an unprejudiced ear. The person here spoken of is Mons. St. Evremond, and the following are his sentiments:—

‘I am no great admirer of comedies in music,* such as now-a-days are in request. I confess I am not displeased with their magnificence; the machines have something that is surprising; the musick, in some places, is charming, the whole together is wonderful: but it must be granted me also, that this wonderful is very tedious; for where the mind has so little to do, there the senses must of necessity languish. After the first pleasure that surprize gives us, the eyes are taken up, and at length grow weary of being continually fixed upon the same object. In the beginning of the concerts we observe the justness of the concords; and amidst all the varieties that unite to make the sweetness of the harmony, nothing escapes us. But ’tis not long before the instruments stun us, and the musick is nothing else to our ears but a confused sound that suffers nothing to be distinguished. Now how is it possible to avoid being tired with the Recitativo, which has neither the charm of singing, nor the agreeable energy of speech? The soul fatigued by a long attention, wherein it finds nothing to affect it, seeks some relief within itself; and the mind, which in vain expected to be entertained with the show, either gives way to idle musing, or is dissatisfied that it has nothing to employ it. In a word the fatigue is so universal, that every one wishes himself out of the house, and the only comfort that is left to the poor spectators, is the hopes that the show will soon be over.

‘The reason why, commonly, I soon grow weary at operas is, that I never yet saw any which appeared not to me despicable, both as to the contrivance of the subject, and the poetry. Now it is in vain to charm the ears, or gratify the eyes, if the mind be not satisfied; for my soul being in better intelligence with my mind than with my senses, struggles against the impressions which it may receive, or at least does not give an agreeable consent to them, without which even the most delightful objects can never afford me any great pleasure. An extravagance, set off with music, dances, machines, and fine scenes, is a pompous piece of folly, but ’tis still a folly. Tho’ the embroidery is rich, yet the ground it is wrought upon is such wretched stuff, that it offends the sight.

‘There is another thing in operas so contrary to nature, that I cannot be reconciled to it, and that is the singing of the whole piece, from beginning to end, as if the persons represented were ridiculously matched, and had agreed to treat in musick both the most common, and most important affairs of life. Is it to be imagined that a master calls his servant, or sends him on an errand, singing; that one friend imparts a secret to another, singing; that men deliberate in council singing; that orders in time of battle are given singing; and that men are melodiously kill’d with swords and darts. This is

* The word *COMEDIE* in French comprehends every kind of theatrical representation; a truer designation of an opera is the term *Tragedie en Musique*; those of Lully are in general so called in the title-page; and it is plain by the context that the author means not the comic but the tragic opera.

‘the downright way to lose the life of representation, which without doubt is preferable to that of harmony; for harmony ought to be no more than a bare attendant, and the great masters of the stage have introduced it as pleasing, not as necessary, after they have perform’d all that relates to the subject and discourse. Nevertheless our thoughts run more upon the musician than the hero in the opera; Luigi, Cavallo, and Cesti, are still present to our imagination. The mind not being able to conceive a hero that sings, thinks of the composer that set the song; and I don’t question but that in the operas at the Palace Royal, Baptist is a hundred times more thought of than Theseus or Cadmus.’†

The same author, speaking of recitative, particularly that of the Venetian opera, says that it is neither singing nor reciting,‡ but somewhat unknown to the ancients, which may be defined to be an aukward use of music and speech.§

It may perhaps be said that music owes much of its late improvement to the theatre, and to that emulation which it has a tendency to excite, as well in composers as performers; but who will pretend to say what direction the studies of the most eminent musicians of late years would have taken, had they been left to themselves; it being most certain that every one of that character has two tastes, the one for himself, and the other for the public? Purcell has given a plain indication of his own, in a declaration that the gravity and seriousness of the

† Works of Mons. St. Evremond, vol. II. page 84, in a letter to Villiers, duke of Buckingham.

‡ This remark upon examination will be found to be but too true, notwithstanding the arguments in favour of recitative, which amount in substance to this, that it is a kind of prose in music, that its beauty consists in coming near nature, and in improving the natural accents of words by more pathetic or emphatical tones. Preface to the opera of Semele by Mr. Congreve. Mr. Hughes to the same purpose, delivers these as his sentiments: ‘The recitative style in composition is founded on that variety of accent which pleases in the pronunciation of a good orator, with as little deviation from it as possible. The different tones of the voice in astonishment, joy, sorrow, rage, tenderness, in affirmations, apostrophes, interrogations, and all other varieties of speech, make a sort of natural music which is very agreeable; and this is what is intended to be imitated, with some helps, by the composer, but without approaching to what we call a tune or air; so that it is but a kind of improved elocution.’ Preface to Mr. Hughes’s Cantatas in the first volume of his Poems.

Upon these several passages it may be remarked, that in the expression of the passions nature doth not offer musical sounds to the human ear: for though the natural tones of grief and joy, the two passions which are most effectually expressed by music, approach nearer to musical precision than any other, yet still they are inconcinuous and unmusical. Farther, that the sounds of the voice in speech are immusical is asserted by Lord Bacon in the following passage: ‘All sounds are either musical sounds, which we call tones, whereunto there may be a harmony; which sounds are ever equal, as singing, the sounds of stringed and wind instruments, the ringing of bells, &c.; or immusical sounds, which are ever unequal; such as the voice in speaking, all whisperings, all voices of beasts and birds, except they be singing birds, all percussions of stones, wood, parchment, skins, as in drums, and infinite others.’ Nat. Hist. cent. II. sect. 101.

The conclusion from these premises must be, that musical sounds do not imitate common speech; and therefore that recitative can in no degree be said to be an improvement of elocution.

But admitting the contrary to be the case, and that the sounds of speech were equally musical with those employed in recitative, the inflexions of the voice are too minute to fall in with the division of the scale, allowing even the enarmonic diesis, or the comma, the smallest of all sensible intervals, to make a part of it; and of this opinion is Mons. Ducloux, who, in the *Encyclopedie*, art. *DECLAMATION DES ANCIENS*, for this reason denies the possibility of a notation for speech.

Upon the whole, the beauties of the recitative style in music consist not in the power of imitating the tones, much less the various inflexions of the voice in speech, but in the varieties of accent and melody, which follow from its not being subject to metrical laws: In short, what has been said and insisted on in this discourse of music in general, may be applied to recitative, viz., that its mimetic powers are very inconsiderable, and that whatever charms it possesses are absolute and inherent.

§ These observations of St. Evremond respect the musical tragedy, but the Italians have also a musical comedy called a *Burletta*, which has been lately introduced into England, and given rise to the distinction in the advertisements for subscriptions of first, second, &c. *serious* man or woman. This entertainment affords additional proof how little music, as such, is able to support itself: in the tragic opera it borrows aid from the tumidity of the poetry; in the comic, from the powers of ridicule, to which music has not the least relation.

Italian music were by him thought worthy of imitation : * the studies of Stradella, Scarlatti, and Bononcini for their own delight were not songs or airs calculated to astonish the hearers with the tricks of the singer, but cantatas and duets, in which the sweetness of the melody, and the just expression of fine poetical sentiments, were their chief praise ; or madrigals for four or more voices, wherein the various excellencies of melody and harmony were united, so as to leave a lasting impression on the mind. The same may be said of Mr. Handel, who, to go no farther, has given a specimen of the style he most affected in a volume of lessons for the harpsichord, with which no one will say that any modern compositions of the kind can stand in competition. These, as they were made for the practice of an illustrious personage, as happy in an exquisite taste and correct judgment as a fine hand, may be supposed to be, and were in fact compositions *con amore*. In other instances this great musician compounded the matter with the public, alternately pursuing the suggestions of his fancy, and gratifying a taste which he held in contempt. †

Whoever is curious to know what that taste could be, to which so great a master as Mr. Handel was compelled occasionally to conform, in prejudice to his own, will find it to have been no other than that which is common to every promiscuous auditory, with whom it is a notion that the right, as some may think, the ability to judge, to applaud and condemn, is purchased by the price of admittance ; a taste that leads all who possess it to prefer light and trivial airs, and such as are easily retained in memory, to the finest harmony and modulation ; and to be better pleased with the licentious excesses of a singer, than the true and just intonation of the sweetest and most pathetic melodies, adorned with all the graces and elegancies that art can suggest. Such critics as these, in their judgment of instrumental performance, uniformly determine in favour of whatever is most difficult in the execution, and, like the spectators of a rope-dance, are never more delighted than when the artist is in such a situation as to render it doubtful whether he shall incur or escape disgrace.

To such a propensity as this, the gratifications whereof are of necessity but momentary, leaving no impression upon the mind, we may refer the ardent thirst of novelty in music, and that almost general reprobation of whatever is old, against the sense of the poet :—

Now, good Cesario, but that piece of song,
That old and antique song we had last night,
Methought it did relieve my passion much ;
More than light airs, and recollected terms
Of these most briak and giddy-paced times.

TWELFTH NIGHT, Act II. Scene iv.

But to account for it is in no small degree difficult : to justify it, it is said that there is a natural vicissitude of things, and that it were vain to expect that music should be permanent in a world where change seems to predominate.

But it may here be observed, that there are certain laws of nature that are immutable and independent on time and place, the precepts of morality and axioms in physics for instance ; there never was since the creation a time when there did not exist an irreconcilable difference between truth and falsehood ; or when two things, each

* It is worth remarking that the poets, who of all writers seem the most sensible of the efficacy of music, appear uniformly to consider it as an intellectual, and consequently, a serious pleasure, engaging not only the attention of the ear, but the powers and faculties of the soul. To this end, and not for the purpose of exciting mirth, it is in numberless instances introduced by Shakespeare ; and among the poems of Milton is one entitled 'At a solemn Music.'

† An intimate friend of Mr. Handel, looking over the score of an opera newly composed by him, observed of some of the songs that they were excellent. 'You may think so,' says Mr. Handel, 'but it is not to them, but to these,' turning to others of a vulgar cast, 'that I trust for the success of the opera.'

equal to the same third, were unequal one to the other ; or, to carry the argument farther, when consonance and dissonance were not as essentially distinguished from each other, both in their ratios and by their effects, as they are at this day ; or when certain interchanges of colours, or forms and arrangements of bodies were less pleasing to the eye than the same are now ; from whence it should seem that there are some subjects on which this principal of mutation does not operate : and, to speak of music alone, that, to justify the love of that novelty which seems capable of recommending almost any production, some other reasons must be resorted to than those above.

But, declining all farther research into the reason or causes of this principle, let us attend to its effects ; and these are visible in the almost total ignorance which prevails of the merits of most of the many excellent artists who flourished in the ages preceding our own : of Tye, of Redford, Shephard, Douland, Weelkes, Wilbye, Est, Bateman, Hilton, and Brewer, we know little more than their names ; these men composed volumes which are now dispersed and irretrievably lost, yet did their compositions suggest those ideas of the power and efficacy of music, and those descriptions of its manifold charms that occur in the verses of our best poets. To say that these and the compositions of their successors Blow, Purcell, Humphrey, Wise, Weldon, and others, were admired merely because they were new, is begging a question that will be best decided by a comparison, which some of the greatest among the professors of the art at this day would shrink from.

Upwards of two hundred years have elapsed since the anthem of Dr. Tye, 'I will exalt thee,' was composed ; and near as long a time since Tallis composed the motett 'O sacrum convivium,' which is now sung as an anthem to the words 'I call and cry to thee, O Lord ;' and it is comparatively but a few years since Geminiani was heard to exclaim in a rapture that the author of it was inspired. ‡ Amidst all the varieties of composition in canon, which the learning and ingenuity of the ablest musicians have produced, that of Bird, composed in the reign of his mistress Elizabeth, is considered as a model of perfection. Dr. Blow's song, 'Go, perjured man,' was composed at the command of king Charles the Second, and Purcell's 'Sing all ye Muses,' in the reign of his successor, but no man has as yet been bold enough to attempt to rival either of these compositions. Nor is there any of the vocal kind, consisting of recitative and air, which can stand a competition with those two cantatas, for so we may venture to call them, 'From rosy bowers,' and 'From silent shades.'

Of poetry, painting, and sculpture, it has been observed that they have at different periods flourished and declined ; and that there have been times when each of those arts has been at greater perfection than now, is to be attributed to that vicissitude of things which gave rise to the present enquiry, and is implied in an observation of Lord Bacon, that in the youth of a state arms do flourish, in its middle age learning, and in its decline mechanical arts and merchandise.§ And if this observation on the various

‡ To this testimony we may add that of a foreigner respecting the church-music of queen Elizabeth's days, thus recorded by Strype in his *Annals of the Reformation*, vol. II. page 314.—

'In her (the queen's) passing, (I say) she visited Canterbury ; how magnificently she was received and entertained here by archbishop Parker, I have related elsewhere. This I only add, that while she was here, the French ambassador came to her. Who hearing the excellent music in the cathedral church, extolled it up to the sky, and brake out into these words : "O God, I think no prince beside in all Europe ever heard the like, no not our Holy Father the Pope himself." A young gentleman that stood by him replied, "Ah, do you compare our queen to the knave of Rome, or rather prefer him before her !" Whereat the ambassador was highly angered, and told it to some of the councillors. They bade him be quiet, and take it patiently, for the boys, said they, with us do so call him and the Roman Anti-christ too.'

§ Essay of Vicissitude of Things.

fates of poetry, painting, and sculpture be true, why is it to be assumed of music that it is continually improving, or that every innovation in it must be for the better? That the music of the church has degenerated and been greatly corrupted by an intermixture of the theatric style, has long been a subject of complaint; the Abbat Gerbert laments this and other innovations in terms the most affecting;* and indeed the evidence of this corruption must be apparent to every one that reflects on the style and structure of those compositions for the church that are now most celebrated abroad, even those of Pergolesi, his masses, for instance, and those of Iomelli and Perez, have nothing that distinguishes them but the want of action and scenic decoration, from dramatic representations: like them they abound in symphony and the accompaniment of various instruments, no regard is paid to the sense of the words, or care taken to suit it with correspondent sounds; the clauses Kyrie Eleison and Christe Eleison, and Miserere mei and Amen are uttered in dancing metres; and the former not seldom in that of a minuet or a jig. Even the funeral service of Perez, lately published in London, so far as regards the measures of the several airs, and the instrumental aids to the voice-parts, differs as far from a sacred and solemn composure as a burletta does from an opera or musical tragedy.

From these premises it may be allowed to follow, that a retrospect to the musical productions of past ages is no such absurdity, as that a curious enquirer need decline it. No man scruples to do the like in painting; the connoisseurs are as free in remarking the excellencies of Raphael, Titian, Domenichino, and Guido, as in comparing succeeding artists with them; and very considerable benefits are found to result from this practice: our present ignorance with respect to music may betray us into a confusion of times and characters, but it is to be avoided by an attention to those particular circumstances that mark the several periods of its progress, its perfection and its decline.

Of the monkish music, that is to say the Cantus Ecclesiasticus, little can be said, other than that it was solemn and devout: after the introduction into the church of music in consonance, great skill and learning were exercised in the composition of motetts; but the elaborate contexture, and, above all, the affectation of musical and arithmetical subtilities in these compositions, as they conduced but little to the ends of divine worship, subjected them to censure, and gave rise to a style, which, for its simplicity and grandeur many look up to as the perfection of ecclesiastical harmony; and they are not a few who think that at the end of the sixteenth century the Romish church-music was at its height, as also that with us of the reformed church its most flourishing state was during the reign of Elizabeth; though others postpone it to the time of Charles II. grounding their opinion on the anthems of Blow, Humphrey, and Purcell, who received their first notions of fine melody from the works of Carissimi, Cesti, Stradella, and others of the Italians.

For the perfection of vocal harmony we must refer to a period of about fifty years, commencing at the year 1560, during which were composed madrigals for private recreation in abundance, that are the models of excellence in their kind; and in this species of music the composers of our own country appear to be inferior to none. The improvement of melody is undoubtedly owing to the drama; and its union with harmony and an assemblage of all the graces and elegancies of both we may behold in the madrigals of Stradella and Bononcini, and the chorusses and anthems of Handel; and among the compositions for private practice in the duets of Steffani and Handel. As to the harmony of instruments, it is the

least praise that can be bestowed on the works of Corelli, Geminiani, and Martini, to say that through all the vicissitudes and fluctuations of caprice and fancy, they retain their primitive power of engaging the affections, and recommending themselves to all sober and judicious hearers.†

To music of such acknowledged excellence as this, the preference of another kind, merely on the score of its novelty, is surely absurd; at least the arguments in favour of it seem to be no better than those of Mr. Bayes in behalf of what he calls the new way of dramatic writing; which however were not found to be of such strength as to withstand the force of that ridicule, which which was very seasonably employed in restoring the people to their wits.

The performance on the organ is for the most part unpremeditated, as the term Voluntary, which is appropriated to that instrument, imports; we may therefore look on this practice as extemporary composition; and it is not enough to be regretted how much the applauses bestowed on the mere powers of execution have contributed to degrade it. Bird and Blow, as organists, are celebrated not so much for an exquisite hand, as for their skill, and that fulness of harmony which distinguished their performance, and which this noble instrument alone is calculated to exhibit.‡ The canzones of Frescobaldi, Kerl, Krieger, and Thiel, and above all, the fugues of Mr. Handel, including those in his lessons, shew us what is the true organ style, and leave us to lament that the idea of a voluntary on the organ is lost in those Capriccios on a single stop, which, as well in our parochial as cathedral service, follow the psalms. As to what is called a concerto on the organ, it is a kind of composition consisting chiefly of solo passages, contrived to display what in modern musical phrase is termed a brilliant finger; and which, if attended to, will, amidst the clamour of the accompaniment, in fact be found instead of four, to consist of but two parts.

But of all the abuses of instrumental performance, none is more injurious to music than the practice of single instruments, exemplified in solos and solo concertos, originally intended for private recreation, but which are now considered as an essential part of a musical entertainment. Music composed for a single instrument, as consisting of the mere melody of one part, is less complicated than that which is contrived for many: and melody is ever more pleasing to an unlearned ear than the harmony of different parts. The uniformity of a minuet, consisting of a determined number of bars, the emphasis of each whereof returns in an orderly succession of measures or times, corresponds with some ideas of metrical regularity which are common to all minds, and affords a reason for that

† Of the instrumental music of the present day, notwithstanding the learning and abilities of many composers, the characteristics of it are noise without harmony, exemplified in the frittering of passages into notes, requiring such an instantaneous utterance, that thirty-two of them are frequently heard in the time which it would take moderately to count four; and of this cast are the Symphonies, Periodical Overtures, Quartettes, Quintettes, and the rest of the trash daily obtruded on the world.

Of solos for the violin, an elegant species of composition, as is evident in those most excellent ones of Corelli and Geminiani, and in many of those of Le Clair, Carbonelli, Festing, and Tartini, few have of late been published that will bear twice hearing; in general, the sole end of them is to display the powers of execution in prejudice to those talents which are an artist's greatest praise.

The lessons for the harpsichord of Mr. Handel, abounding with fugues of the finest contexture, and the most pathetic airs, are an inexhaustible fund of delight; those of the present time have no other tendency than to degrade an instrument invented for the elegant recreation of the youthful of the other sex, and to render it what at best it now appears to be, and may as truly as emphatically be termed, a tinkling cymbal.

‡ Old Mr. Arthur Bedford, chaplain to Aske's Hospital at Hoxton, and who died not many years ago, was acquainted with Dr. Blow, and says of him that he was reckoned the greatest master in the world for playing most gravely and seriously in his voluntaries. The Great Abuse of Musick, by Arthur Bedford, M.A. Lond. 8vo. 1711, page 248.

* De Cantu et Musica Sacra. tom. II. page 375.

delight which the ear receives from the pulsatile instruments. Hence it is easy to account for the obtrusion of such compositions on the public ear as furnish opportunities of displaying mere manual proficiency in the artist; a solo or a concerto on the violin, the violoncello, the hautboy, or some other such instrument, does this, and gives scope for that exercise of a wild and exuberant fancy which distinguishes, or rather disgraces, the instrumental performance of this day.

The first essays of this kind were solos for the violin, the design whereof was to affect the hearer by the tone of the instrument, and those graces of expression which are its known characteristic; but it was no sooner found that the merit of these compositions was estimated by the difficulty of performing them, than the plaudits of the auditory became an irresistible temptation to every kind of extravagance. These have been succeeded by compositions of a like kind, but framed with a very different view, Solos and Concertos, containing passages that carried the melody beyond the utmost limits of the scale, indeed so high on the instrument, that the notes could not be distinctly articulated, in violation of a rule that Lord Bacon has laid down, that the mean tones of all instruments, as being the most sweet, are to be preferred to those at either extremity of either the voice or instrument.* The last improvement of licentious practice has been the imitation of tones dissimilar to those of the violin, the flute, for instance, and those that resemble the whistling of birds; and the same tricks are played with the violoncello. To what farther lengths these extravagances will be carried, time only can discover.

Amidst that stupor of the auditory faculties, which leads to the admiration of whatever is wild and irregular in music, a judicious hearer is necessitated to seek for delight in those compositions, which, as owing their present existence solely to their merit, must, like the writings of the classic authors, be looked on as the standards of per-

* Nat. Hist. cent. II. sect. 173. The *Sylva Sylvarum*, or Natural History of Lord Bacon, contains a great variety of experiments and observations tending to explain the properties of sound and the nature of harmony. The following judicious remark may serve as a specimen of the author's skill in his subject, and at the same time shew his sentiments of harmony, and in what he conceived the perfection thereof to consist. 'The sweetest and best harmony is, when every part or instrument is not heard by itself, but a confation of them all; which requireth to stand some distance off, even as it is in the mixture of perfumes, or the taking of the smells of several flowers in the air.' Cent. III. sect. 225.

fection; in the grave and solemn strains of the most celebrated composers for the church, including those of our own country, who in the opinion of the best judges are inferior to none; † or in the gayer and more elegant compositions, as well instrumental as vocal, of others contrived for the recreation and solace, in private assemblies and select companies, of persons competently skilled in the science.

How far remote that period may be when music of this kind shall become the object of the public choice, no one can pretend to tell. To speak of music for instruments, the modern refinements in practice, and the late improvements in the powers of execution have placed it beyond the reach of view: and it affords but small satisfaction to a lover of the art to reflect that the world is in possession of such instrumental compositions as those of Corelli, Bononcini, Geminiani, and Handel, when not one principal performer in ten has any relish of their excellencies, or can be prevailed on to execute them but with such a degree of unfeeling rapidity as to destroy their effect, and utterly to defeat the intention of the author. In such kind of performance, wherein not the least regard is paid to harmony or expression, we seek in vain for that most excellent attribute of music, its power to move the passions, without which this divine science must be considered in no better a view than as the means of recreation to a gaping crowd, insensible of its charms, and ignorant of its worth.

† Such music as this has been the delight of the wisest men in all ages. Luther, who was so great an admirer of music, that he scrupled not as a science, to rank it next to theology, which is styled the queen of the sciences, was often used to be recreated with the singing of motetts. Bishop Williams, while he was lord keeper, chose to retain the deanery of Westminster for the sake of the choral service performed there: 'He was loathe,' says the historian, 'to stir from the seat where he had the command of such exquisite music.' And in a more particular manner the same person speaks of the love which that great prelate bore to music, for, says he, 'that God might be praised with a cheerful noise in his sanctuary, he procured the sweetest music both for the organ and voices of all parts that ever was heard in an English quire. In those days that abbey and the Jerusalem Chamber, where he gave entertainment, were the volaries of the choicest singers that the land had bred.' Life of the Lord Keeper Williams, by Hackett, Bishop of Litchfield and Coventry, page 82, 46. Milton has been very explicit in declaring what kind of music delighted him most, in the verses entitled 'At a solemn music.' Dr. Busby the master of Westminster-school had an organ, and music of the most solemn kind in his house at the time when choral service was throughout the kingdom forbidden to be performed. Vide ante, page xxi. in note.

A

GENERAL HISTORY

OF THE

SCIENCE AND PRACTICE OF MUSIC.

BOOK I. CHAP. I.

THERE is scarce any consideration that affords greater occasion to lament the inevitable vicissitude of things, than the obscurity in which it involves, not only the history and the real characters, but even the discoveries of men. When we consider the various pursuits of mankind, that some respect merely the interest of individuals, and terminate with themselves, while others have for their object the investigation of truth, the attainment and communication of knowledge, or the improvement of useful arts; we applaud the latter, and reckon upon the advantages that posterity must derive from them: but this it seems is in some degree a fallacious hope; and, notwithstanding the present improved state of learning in the world, we have reason to deplore the want of what is lost to us, at the same time that we rejoice in that portion of knowledge which we possess.

Whoever is inclined to try the truth of this observation on the subject of the present work, if he does not see cause to acquiesce in it, will at least be under great difficulties to satisfy himself how it comes to pass, that seeing what miraculous effects have been ascribed to the music of the ancients, we know so little concerning it, as not only to be ignorant of the use and application of most of their instruments, but even in a great measure of their system itself.

To say that in the general deluge of learning, when the irruptions of barbarous nations into civilized countries, the seats and nurseries of science, became frequent, music, as holding no sympathy with minds actuated by ambition and the lust of empire, was necessarily overwhelmed, is not solving the difficulty; for though barbarism might check, as it did, the growth of this as well as other arts, the utter extirpation of it seems to have been as much then, as it is now, impossible. That conquest did not produce the same effect on the other arts is certain; the architecture, the sculpture, and the poetry of ancient Greece and Rome, though they withdrew for a time, were yet not lost, but after a retirement of some centuries appeared again. But what became of their music is still a question: the

Pyramids, the Pantheon, the Hercules of Glycon, the Grecian Venus, the writings of Homer, of Plato, of Aristotle, and other ancients, are still in being; but who ever saw, or where are deposited, the compositions of Terpander, Timotheus, or Phrynis? Did the music of these, and many other men whom we read of, consist of mere Energy, in the extemporary prolotion, of solitary or accordant sounds; or had they, in those very early ages, any method of notation, whereby their ideas of sound, like those of other sensible objects, were rendered capable of communication? It is hard to conceive that they had not, when we reflect on the very great antiquity of the invention of letters; and yet before the time of Alypius, who lived A. C. 115, there are no remaining evidences of any such thing.

The writers in that famous controversy set on foot by Sir William Temple, towards the close of the last century, about the comparative excellence of the ancient and modern learning, at least those who sided with the ancients, seem not to have been aware of the difficulty they had to encounter, when they undertook, as some of them did, to maintain the superiority of the ancient over the modern music, a difficulty arising not more from the supposed weight on the other side of the argument, than from the want of sufficient Data on their own. In the comparison of ancient with modern music, it was reasonable to expect that the advocates for the former should at least have been able to define it; but Sir William Temple, who contends for its superiority, makes no scruple to confess his utter incapacity to judge about it: 'What,' says he, 'are become of the charms of music, by which men and beasts, fishes, fowls, and serpents were so frequently enchanted, and their very natures changed; by which the passions of men are raised to the greatest height and violence; and then so suddenly appeased, so as they might be justly said to be turned into lions or lambs, into wolves or into harts, by the powers and charms of this admirable art? 'Tis agreed of all the learned that the science of music, so admired by the ancients, is wholly lost in the world, and that what we have now is made up of certain notes that fell into the fancy or observation

of a *poor friar* in chanting his mattins : so as those two divine excellences of music and poetry are grown in a manner to be little more but the one *fiddling*, and the other rhyming, and are indeed very worthy the ignorance of the friar, and the barbarousness of the Goths that introduced them among us.*

Whatever are the powers and charms of this admirable art, there needs no further proof than the passage above-cited, that the author of it was not very susceptible of them ; for either the learned of these later times are strangely mistaken, or those *certain notes*, which he speaks so contemptuously of, have, under the management of skilful artists, produced effects not much less wonderful than those attributed to the ancient music. And it is not to be imagined but that Sir William Temple, in the course of a life spent among foreigners of the first rank, and at a time when Europe abounded with excellent masters, must have heard such music, as, had he had any ear to appeal to, would have convinced him that the art had still its charms, and those very potent ones too.

But, not to follow the example of an author, whose zeal for a favorite hypothesis had led him to write on a subject he did not understand, we will proceed to trace the various progress of this art : its progress, it is said, for the many accounts of the time of the invention, as well as of the inventors of music, leave us in great uncertainty as to its rise. The authority of poets is not very respectable in matters of history ; and there is hardly any other for those common opinions that we owe the invention of music to Orpheus, to Amphion, Linus, and many others ; unless we except that venerable doctor and schoolman, Thomas Aquinas, who asserts, that not music alone, but every other science, was understood, and that by immediate revelation from above, by the first of the human race. However, it may not be amiss to mention the general opinions as to the invention of music, with this remark, that no greater deference is due to many of them than is paid to other fables of the ancient poets and mythologists.

There can be no doubt but that vocal music is more ancient than instrumental, since mankind were endowed with voices before the invention of instruments ; but the great question is, at what time they began to frame a system, and this naturally leads to an inquiry into the time of the invention of instruments ; for if we consider the evanescence of sound uttered by the human voice, the notion of a system without, is at this day not very intelligible.

But previous to any such inquiry, we may very reasonably be allowed the liberty of conjecture, in which if we indulge ourselves, we cannot suppose but that an art so suited to our natures, and adapted to our organs, as music is, must be nearly as ancient as those of Agriculture, Navigation, and numberless other inventions, which the necessities of mankind suggested, and impelled them to pursue : the desire of the conveniences, the comforts, the pleasures of life, is a principle little less active than that which leads

us to provide for its wants ; and perhaps it might be even before they had learned to 'go down to the sea in ships' that men began to 'handle the harp and organ,' which it cannot be supposed they could do to any other delightful purpose, without some knowledge of those harmonical relations and coincidences of sound, which are the essence of the art. Such a knowledge as this we may easily conceive was soon attained by even the earliest inhabitants of the earth. The voices of animals, the whistling of the winds, the fall of waters, the concussion of bodies of various kinds, not to mention the melody of birds, as they all contain in them the rudiments of harmony, may easily be supposed to have furnished the minds of intelligent creatures with such ideas of sound, as time, and the accumulated observation of succeeding ages, could not fail to improve into a system.†

† Lucretius supposes that mankind took their first notions of music from the singing of birds :—

At liquidas avium voces imitantes ore
Ante fuit multò, quam levìa carmina cœntu
Concelebrare homines possent, aureisque juvare. LIR. V.

And the same poet has in some sort ascertained the origin of wind instruments in the following elegant verses :—

Et zephyri cava per calamorum sibilis primum
Agrestis docuere cavas inflare cicutas,
Inde minutatim dulcioris quereelas,
Tibia quas fundit digitis pulsata canentum. Ibid.

Thro' all the woods they heard the charming noise
Of chirping birds, and try'd to frame their voice
And imitate. Thus birds instructed man,
And taught them songs before their art began ;
And whilst soft evening gales blew o'er the plains,
And shook the sounding reeds, they taught the swains,
And thus the pipe was fram'd and tuneful reed. CREECH.

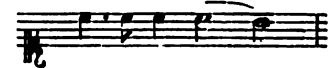
Part of the natural song of the blackbird consists of true diatonic intervals, and is thus to be expressed in musical notes :—



That of the cuckoo is well known to be this :—



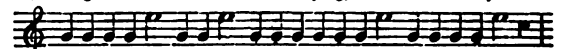
And Kircher, Musurg. lib. I. cap. xiv., has given the songs of other birds, which with great ingenuity and industry he had investigated, as namely that of the nightingale, the quail, the parrot, the cock and hen, in the common characters of musical notation. Though that which he gives of the common dunghill cock seems to be erroneous, and is thus to be expressed :—



And it may be observed that between the dunghill and bantam cock there is a difference, for the latter intones the following sounds, which constitute the interval of a true fifth :—



The song of the hen at the time of her laying, is thus described by him :—



and clearly appears to be an intonation of a major sixth,

The same author asserts that other animals, and even quadrupeds, articulate different sounds that have a musical ratio to each other, as an instance whereof he mentions an animal produced in America called the *Pigritia*, or *Siath*, of which he gives the following curious account :—

'Before I speak of his voice I will give a description of this whole animal, which this very year I received from the mouth of father Johannes Torus, procurator of the province of the new kingdom in America, who had some of these animals in his possession, and made several trials of their natures and properties. The figure of this animal is uncommon, they call it *Pigritia*, on account of the slowness of its motions. It is of the size of a cat, has an ugly countenance, and claws projecting in the likeness of fingers : it has hair on the back part of its head, which covers its neck ; it brushes the very ground with its fat belly. It never rises upon its feet, but moves forward so slowly, that

* Essay on ancient and modern learning.

A reason has already been given to show that the notion of a musical system does necessarily presuppose musical instruments; it therefore becomes necessary to trace the invention of such instruments as are distinguished by the simplicity of their construction, and whose forms and properties at this distance of time are most easily to be conceived of, and these clearly seem to be reduced to two, the lyre and the pipe.

The lyre, the most considerable of the two, and the prototype of the *fidicinal* or stringed species, is said to have been invented about the year of the world 2000, by Mercury, who finding on the bank of the river Nile a shell-fish of the tortoise kind, which an inundation of that river had deposited there, and observing that the flesh was already consumed, he took up the back shell, and hollowing it, applied strings to it;* though concerning the number of strings there is great controversy, some asserting it to be only three, and that the sounds of the two remote were acute and grave, and that of the intermediate one a mean between those two extremes: that Mercury resembled those three chords to as many seasons of the year, which were all that the Greeks reckoned, namely, Summer, Winter, and Spring, assigning the acute to the first, the grave to the second, and the mean to the third.

Others assert that the lyre had *four* strings ; that the interval between the first and fourth was an octave ; that the second was a fourth † from the first.

* it scarce in a continued space advances above the cast of a dart in even fifteen days. No one knows what meat it feeds on, nor are they seen to eat; they for the most part keep on the tops of trees, and are two days ascending and as many in descending. Moreover, nature seems to have furnished them with two kinds of arms or weapons against other beasts and animals their enemies. First their feet, in which they have such strength, that whatsoever animal they lay hold on they keep it so fast, that it is never after able to free itself from their nails, but it is compelled to die through hunger: and the other is, that this beast so greatly affects the men that are coming towards it by its countenance, that in pure compassion they refrain from molesting it, and easily persuade themselves not to be solicitous about that which nature has subjected to so defenceless and miserable a state of body. The above-mentioned father, in order to make a trial of this, procured one of these animals to be brought to the college of our society at Carthage of the new kingdom, and threw a long pole under its feet, which he immediately grasped so tenaciously, that it would by no means let it go; the animal thus bound by a voluntary suspension, was placed between two beams, where he stuck thus suspended for forty days together, without either meat, drink, or sleep, having his eyes continually fixed on those that looked on him, whom he affected so with his sorrowful aspect, that there was scarce any one that was not touched with pity for him. Being at length freed from this long suspension, a dog was thrown to him, which he immediately seized with his feet, and forcibly detained for the space of four days, at the end whereof the miserable creature expired, being 'famished through hunger.' This I had from the mouth of the above father.

saifer. add, moreover, (to return to the purpose) that this beast makes no noise or cry but in the night, and that with a voice interrupted only by the duration of a sigh or semi-pause. It perfectly imitates, as learners do, the first elements of music, *re, ut, fa, sol, la, la, sol, fa, mi, re, ut*. Ascending and descending through the common intervals of the six degrees, inasmuch that the Spaniards, when they first took possession of these coasts, and perceived such a kind of vociferation in the night, thought they heard new and unknown tunes, and the reason of this was, that the inhabitants *do* find no other reason than that it repeats through every degree of the interval of a sixth the sound *Aa, ka, ka, ka, ka, ka, ka, ka, ka*.



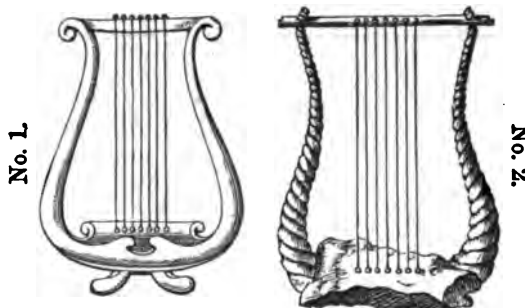
* Nicomachi Harmonices Manualis, lib. II. ex vers. Melbom. p. 29

† In this and in all other instances, where the measures of intervals are assigned, it is to be observed that they include the two extreme terms, in which respect the phrases of music and physic agree; to this purpose a very whimsical but ingenious and learned writer on music and many other subjects, in the last century, namely Charles Butler, thus speaks: 'As physicians say a tertian ague, which yet cometh but every second day, and a quartan, whose access is every third day, (because they count

and the fourth the same distance from the third, and that from the second to the third was a tone.†

Another class of writers contend that the lyre of Mercury had *seven* strings : Nicomachus, a follower of Pythagoras, and the chief of them, gives the following account of the matter : 'The lyre made 'of the shell was invented by Mercury, and the 'knowledge of it, as it was constructed by him of 'seven strings was transmitted to Orpheus ; Orpheus 'taught the use of it to Thamyris and Linus, the 'latter of whom taught it to Hercules, who communicated it to Amphion the Theban, who built the 'seven gates of Thebes to the seven strings of the 'lyre.' The same author proceeds to relate 'that 'Orpheus was afterward killed by the Thracian 'women, and that they are reported to have cast his 'lyre into the sea, which was afterwards thrown up 'at Antissa, a city of Lesbos : that certain fishers 'finding it, they brought it to Terpander, who carried 'it to Egypt, exquisitely improved, and shewing it 'to the Egyptian priests, assumed to himself the 'honour of its invention.'

And with respect to the form of the ancient lyre, as little agreement is to be found among authors as about the number of strings; the best evidences concerning it are the representations of that instrument in the hands of ancient statues of Apollo, Orpheus, and others, on bass reliefs, antique marbles, medals and gems; || but of these it must be confessed that they do not all favour the supposition that it was originally formed of a tortoise shell; though on the other hand it may be said, that as none of those monuments can pretend to so high an antiquity as the times to which we assign the invention of the lyre, they are to be considered as exhibitions of that instrument in a state of improvement, and therefore are no evidence of its original form. Galilei mentions a statue of Orpheus in the Palazzo de Medici, made by the Cavalier Bandinelli, in the left hand whereof is a lyre of this figure.¶ (No. 1.) He also cites a passage from Philostratus, importing that the lyre was made of the horns of a goat, from which Hyginus undertook thus to delineate it. (No. 2.)



'the first fit-day for one) so do musicians call a third, a fourth, and a fifth (which yet are but two, three, and four notes from the ground) because 'they account the ground itself for one.' *Principles of Music*, by Charles Butler, quarto, London 1636, pag. 52, in not.

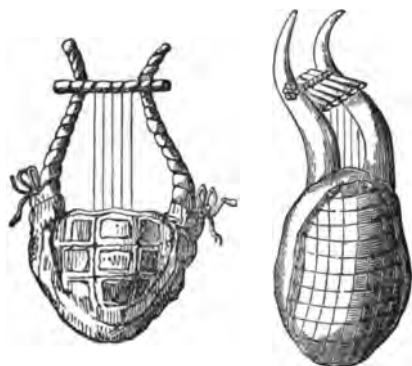
‡ Boetius de Musica, lib. I. pag. 20.

§ Nicom. lib. II. pag. 29.

Merennus de Instrumentis Harmonicis, lib. I. pag. 7. Vincentio Galilei Dialogo della Musica Antica e Moderna, pag. 125. Athanasius Kircher Musurgia universalis, lib. II. cap. vi. § III.

7 Gallot. 129.

Mersennus says that by means of his friends Naudé and Gaffarel, he had obtained from Rome, and other parts of Italy, drawings of sundry ancient instruments from coins and marbles; among many which he has given, are these of the lyre; the first is apparently a part of a tortoise shell, the other is part of the head with the horns of a bull.

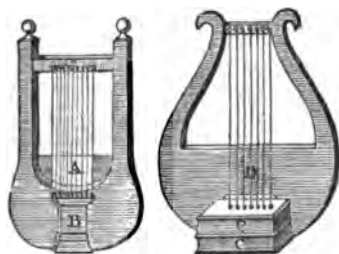


The above-cited authors mention also a *Plectrum*, of about a span in length, made of the lower joint of a goat's leg; the use whereof was to touch the strings of the lyre, as appeared to Galilei by several ancient bass-reliefs and other sculptures discovered at Rome in his time.

Kircher has prefixed as a frontispiece to the second tome of the *Musurgia*, a representation of a statue in the Matthei garden near Rome, of Apollo standing on a circular pedestal, whereon are carved in basso relievo a great variety of ancient musical instruments. But the most perfect representation of the lyre is the instrument in the hand of the above statue, which is of the form in which the lyre is most usually delineated. Vide *Musurg. tom. I. pag. 536.**

The pipe, the original and most simple of wind instruments, is said to have been formed of the shank-bone of a crane, and the invention thereof is ascribed to Apollo, Pan, Orpheus, Linus, and many others. Marsyas, or as others say, Silenus, was the

* Isaac Vossius, a bigotted admirer of the ancients, de *Poemat. cant. et virib. Rythm.* pag. 97, contends that hardly any of these remaining monuments of antiquity are in such a state as to warrant any opinion touching the form of the ancient lyre. He speaks indeed of two statues of Apollo in the garden of his Britannic majesty at London, in the year 1673, (probably the Privy Garden behind the then palace of Whitehall) each holding a lyre; and as neither of these instruments was then in the least mutilated, he considers them as true and perfect representations of the ancient cythara or lyre, in two forms, and has thus delineated and described them:—



- A The bridge over which the chords are stretched.
 B The chordotomum, from which the chords proceed.
 C The cœter, made of brass, and affixed to the bridge to encrease the sound.
 D The bridge as in the former figure.

first that joined pipes of different lengths together with wax; but Virgil says,

*Pan primos calamos cera conjungere plures
 Instituit.*†

forming thereby an instrument, to which Isidore, bishop of Seville, gives the name of Pandorium, and others that of Syringa and which is frequently represented in collections of antiquities.‡

As to the instruments of the pulsatile kind, such as are the Drum, and many others, they can hardly be ranked in the number of musical instruments; inasmuch as the sounds they produce are not reducible to any system, though the measure and duration or succession of those sounds is; which is no more than may be said of many sounds, which yet are not deemed musical.

Such are the accounts that are left us of the invention of the instruments above-mentioned, which it is necessary to make the basis of an enquiry into the origin of a system, rather than the Harp, the Organ, and many others mentioned in sacred writ, whose invention was earlier than the times above referred to, because their respective forms are known even at this time of day to a tolerable degree of precision: a lyre consisting of strings extended over the concave of a shell, or a pipe with a few equidistant perforations in it, are instruments we can easily conceive of; and indeed the many remaining monuments of antiquity leave us in very little doubt about them; but there is no medium through which we can deduce the figure or construction of any of the instruments mentioned either in the Pentateuch, or the less ancient parts of sacred history; and doubtless the translators of those passages of the Old Testament, where the names of musical instruments occur, after due deliberation on the context, found themselves reduced to the necessity of rendering those names by such terms as would go the nearest to excite a correspondent idea in their readers: so that they would be grossly mistaken who should imagine that the organ, handled by those of whom Jubal is said to have been the father,§ any way resembled the instrument now known among us by that name.

Those accounts which give the invention of the lyre to Mercury, agree also in ascribing to him a system adapted to it; though with respect to the nature of that system, as also to the number of strings of which the lyre consisted, there is a great diversity of opinions; and indeed the settling the first of these questions would go near to determine the other. Boetius inclines to the opinion that the lyre of Mercury had only four strings; and adds, that the first and the fourth made a diapasen; that the middle distance was a tone, and the extremes a diapente.||

Zarlino, following Boetius, adopts his notion of a tetrachord, and is more particular in the explanation of it;¶ his words are as follows:—'From the first string to the second was a diatessaron or a fourth;

† *Ecolg.* II. ver. 32.

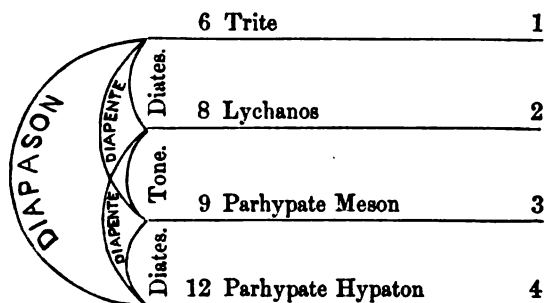
‡ Vide Mersén. de *Instrum. Harmon.* lib. II. pag. 73.

§ *Genesie*, chap. iv. ver. 21.

|| De *Musica*, lib. I. cap. 20. Bontempi, 48.

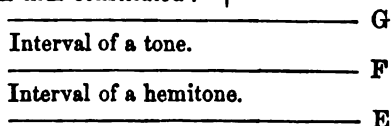
¶ *Institution Harmonique*, pag. 72.

'from the second to the third was a tone; and from the third to the fourth was a diatessaron; so that the first with the second, and the third with the fourth, contained a diatessaron; the first with the third, and the second with the fourth, a diapente or fifth.' Admitting all which, it is clear that the first and fourth strings must have constituted a diapason.



It is to be observed that the above diagram is used by Boetius, and is adopted by Zarlino, Kircher, and many other writers; * but that though the application of the letters C G F C in one edition of Boetius, is plainly intended to shew that the strings immediately below them were supposed to correspond with those notes in our system, yet the authors who follow Boetius have not ventured to make use of them; and indeed there is great reason to reject them; for in the earlier editions of Boetius de Musica, the diagram above given is without letters. It seems as if Glareanus, who assisted in the publication of the Basil edition of that author, in 1570, thought he should make the system more intelligible by the addition of those letters; but there is no ground to suppose that the Mercurian lyre, admitting it to consist of four strings, was so constructed.

Bontempi, an author of great credit, relying on Nicomachus, suspects the relation of Boetius, as to the number of the strings of the Mercurian lyre; and farther doubts whether the system of a diapason, as it is above made out, did really belong to it or not; and indeed his suspicions seem to be well grounded; for, speaking of this system, he says that none of the Greek writers say anything about it, and that the notion of its formation seems to be founded on a discovery made by Pythagoras, who lived about 500 years before Christ, of which a very particular relation will be given in its proper place; and farther to shew how questionable this notion is, he quotes the very words of Nicomachus before cited, concluding with a modest interposition of his own opinion, which is that the lyre of Mercury had *three* strings only, and was thus constituted:—†



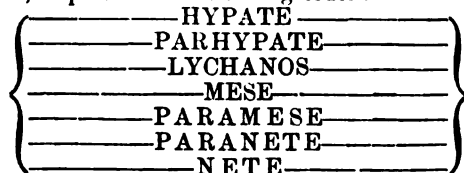
However, notwithstanding the reasons of the above

author, the received opinion seems to have been that the lyre consisted of four strings, tuned to certain concordant intervals, which intervals were undoubtedly at first adjusted by the ear; but nevertheless had their foundation in principles which the inventor was not aware of, though what that tuning was, is another subject of controversy. Succeeding musicians are said to have given a name to each of these four strings, which names, though they are not expressive of the intervals, are to be adopted in our inquiry after a system: to the first or most grave was given the name of Hypate, or principal; the second was called Parhypate, viz., next to Hypate; the third was called Paranete, and the fourth Nete, which signifies lowest; it is observable here, that it seems to have been the practice of the ancients to give the more grave tones the uppermost place in the scale, contrary to the moderns, by whom we are to understand all who succeeded the grand reformation of music by Guido, in the eleventh century, of which there will be abundant occasion to speak hereafter.

The several names above-mentioned, exhibit the lyre in a very simple state, viz., as consisting of four strings, having names from whence neither terms nor intervals can be inferred.



Those who speak of the lyre in the manner above-mentioned, seem to imagine that its compass included two diatessarons or fourths, which being conjoined, extended to a seventh, differing from that of Boetius, in that his diatessarons, being separated by a tone, took in the extent of an octave, and thereby formed a diapason. They proceed to relate farther, that Chorebus, the son of Atys, king of Lydia, added a fifth string, which he placed between Parhypate and Paranete, calling it, from its middle situation, Mese; that Hyagnis, a Phrygian, added a sixth, which he placed between Mese and Parhypate; this string he called Lychanos, a word signifying the *indicial* finger, viz., that on the left hand, next the thumb: and lastly say these writers, Terpander added a seventh string, which he placed between Mese and Paranete, and called Paramese: the lyre, thus improved, included a septenary, or system of seven terms, disposed in the following order:—



CHAP. II.

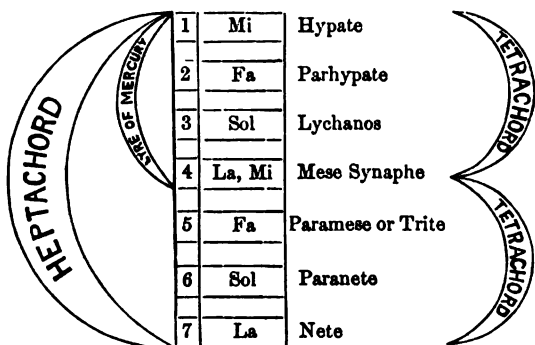
THE system-above exhibited was the Heptachord Synemmenon of the Greeks; it consisted of two tetrachords or fourths, conjoined, that is to say, the middle term was the end of the one, and the beginning of the other; and as the last string was added

* Vide Boetius de Musica, lib. I. cap. 20. Kircher, Musurgia universalis, tom. I. lib. II. cap. 6. Zarlino Ist. Harmon. pag. 73. 75.

† Hist. Music. pag. 40.

by Terpander, the system was distinguished by his name, and considered as the second state of the lyre.

Here then we may discern the foundation of a system, viz., a succession of seven sounds, including two tetrachords, conjoined, by having the Mese or middle term common to both, thus represented by Glareanus in his edition of Boetius, lib. i. cap. 20 :—



The seeming perfection of this system, as also the consideration that in musical progression every eighth sound is but the replicate of its unison, has served to confirm an opinion that there is somewhat mysterious in the number seven : to say the truth, for different reasons an equal degree of perfection has been ascribed to almost every other of the digits : the number four was greatly revered by Pythagoras and his disciples, as that of three is at this day by many Christians. Seven and nine multiplied into themselves made sixty-three, commonly esteemed the grand climacteric of our lives ; the ground of superstitious fears in persons of middle age, and the subject of much learned disquisition : and there is now extant a treatise in folio, intitled, *Mysticæ numerorum significationis*, written by one Peter Bongus, and published at Bergamo, in the year 1585 ; the sole end whereof is to unfold the mysteries, and explain the properties of certain numbers ; and whoever has the curiosity to search after so insignificant a work, will find that in the judgment of its author this of Seven is intitled to a kind of pre-eminence over almost every other number.

Had these opinions of numerical mystery no better a foundation than the suffrage of astrologers, they would hardly deserve confutation, even though perhaps in the case of errors so glaring, to expose is to detect them ; but when we find them maintained not only by men of sound understandings, but by the gravest philosophers, they become matter of importance ; at least there is somewhat of curiosity in observing the extravagancies of an heated imagination, and marking the absurdities that a favourite hypothesis will frequently lead men into.

There is not perhaps a more pregnant instance of this kind, or of the misapplication of learned industry, than the work above-mentioned ; as a proof whereof the following chapter is selected, as well by way of specimen of the manner of reasoning usual among writers of his class, as to explain the properties of the number seven, the only one which we are here

concerned to enquire about. If the arguments in favour of its perfection are not so conclusive as might be expected, the reader may rest assured that they are some of the best that have yet been adduced for the purpose :—

‘The number Seven,’ says this learned author, ‘has a wonderful property, for it neither begets nor is begotten, as the rest are, by any of the numbers within ten, wherefore philosophers resemble it to the ruler or governor of all things, who neither moves nor is moved. Philolaus the Pythagorean, no ignoble author, testifies thus, and writes that the eternal God is permanent, void of motion, similar to himself, and different from others ; and Boetius has a passage much to the same purpose. The idea of virginity had such a relation to the number Seven, that it was also named Pallas ; and the Pythagoreans, initiated in her rites, compare the virgin Minerva to that number, seeing she was not born, but sprung from the head of Jupiter. God rested on the Seventh day, wherefore it is named Sabbath, a word signifying rest. The Seventh petition of the Lord’s Prayer is, deliver us from evil ; because the number Seven denotes rest, and all evil being removed from man, he rests in good ; and farther, the seventh day or sabbath represents death, or the rest of the soul from worldly labours. In Seven days after Noah entered the ark the flood began : in the Apocalypse Seven trumpets are mentioned : Job speaks of the visitation of six tribulations, which six succeeding days brought on him, but on the Seventh no harm could touch the just : God blessed only the Seventh day, wherefore the number Seven is attributed to the Holy Ghost, without whom there is no blessing. This St. John proves, when in the Apocalypse he calls the Seven horns and the Seven eyes the Seven spirits of God. The fever left the son of Regulas, according to St. John, at the Seventh hour. Elisha breathed Seven times on the dead man. Christ after his resurrection feasted with Seven disciples ; and Seven brothers were sent to baptise Cornelius. The Seven hairs of Sampson ; Seven golden candlesticks : and in Leviticus command was given to sprinkle the blood and oil Seven times. The Seven stars in the bear ; the Seven principal angels who rule the world under God, and have charge of the Seven planets, as namely, Horophiel the spirit of Saturn, Anael the spirit of Venus, Zachariel of Jupiter, Raphael of Mercury, Samael of Mars, Gabriel of the moon, and Michael the spirit of the sun. The moon changes its form Seven times, and completes its course in twenty-eight days, which is the sum of the number Seven, and all the numbers under it. Josephus writes that a certain river in Syria is dry for six days, and full on the Seventh. Farther, the great artist did not only dignify the heavens, but he also adorned with the number Seven his favourite creature man, who has seven inward parts, or bowels, stomach, heart, lungs, milt, liver, reins, and bladder ; and seven exterior, as head, back, belly, two hands, and two feet. There are seven objects of sight, as body, distance, figure, magnitude, colour, motion,

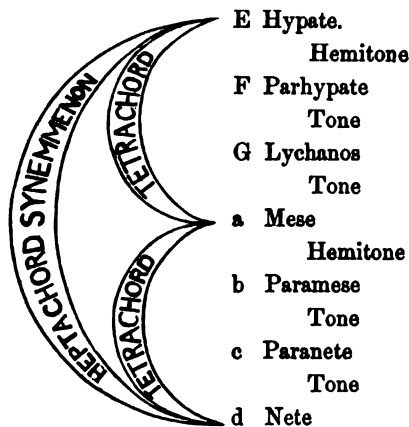
'and rest : and Seven species of colour, taking in the two extremes of white and black, viz., yellow, sky-blue, green, purple, and red. No one can without eating live after the Seventh day. Physicians reckon ten times Seven years to be the period of human life, which Hippocrates divides into Seven stages. The ancient lyre, used both by Orpheus and Amphion, had only Seven chords, answering, as it is said, to the Seven gates of Thebes. Every Seventh daughter, no son coming between, hath, by virtue of the number Seven as I imagine, a great power in easing the pains of child-birth : and every Seventh son, no daughter coming between, has the power of curing the scurvy and leprosy by the bare touch ; so that diseases, incurable by physicians, are curable by the virtue contained in the number Seven. A right-angled triangle is constituted of the sides three, four, five, but three and four contain the right angle, which is perfection itself, and therefore their sum seven, must as a number be most perfect. Every active body has three dimensions, length, breadth, and thickness, and these have four extremes, point, line, surface, and solid, and these together make up the number Seven.'

By such arguments as these do many of the musical writers endeavour to excite a mysterious reverence for that number which is confessedly the limits of a system, as far as it goes, perfect in its kind ; in answer to which it may be said, that this superstitious regard for certain numbers seems to be very deservedly ranked among those vulgar and common errors, which it is professedly the end of a very learned and justly celebrated publication of the last century to refute, wherein it is said, that 'with respect to any extraordinary power or secret virtue attending the number sixty-three, or any other, a serious reader will hardly find anything that may convince his judgment, or any farther persuade than the lenity of his belief, or pre-judgment of reason inclineth.'

But to return from this digression : the rudiments of the present greater musical system are discernible in that of a septenary, adjusted, as we are told, by Terpander, in the form above declared ; and as to the intervals of which it was constituted, modern authors have not scrupled to assert that they were precisely the same as those contained in a double diatessaron, according to the present practice ; the consequence whereof must be, that each of the two tetrachords, of which the above system is supposed to have been formed, consisted of a hemitone and two tones ; which will be readily conceived by such as reflect, that in the passage either upwards or downwards from any given note to its fourth, in that progression which is most grateful to the ear, those intervals must necessarily occur. Persuaded of the truth of this supposition, succeeding musicians have ventured to apply the modern method of notation to the terms of the ancients, and are pretty well agreed that the term Mese answered to A, or LA,

in our scale. Taking this for granted, the system of Terpander will appear in the following form :—

SYSTEM OF TERPANDER.



But here it is necessary to observe, that though, as has been said, it was the practice with the ancients to give the grave tones the uppermost, and the more acute the lowermost place in their scale,† which they might very properly do, if, as there is the greatest reason to believe, their music was solitary, and they were strangers to the art of combining sounds in consonance. Yet the moderns, immediately on the making that most important discovery, found it necessary to differ from them, and accordingly we now place the grave tones at the bottom, and the acute at the top of our scale ;‡ the consequence of this diversity has been, that whenever any of the modern authors have taken occasion to exhibit the whole or any part of the ancient Greek scale, they have done it in their own way, placing Hypate at the bottom of the diagram ; and this will be the method we shall observe for the future.

Great confusion has arisen among the writers on music, in respect to the order of the several additions to the system of Terpander. That it was perfected by Pythagoras will be related in due time ; but the eagerness of most authors to explain the improvements made by him, has betrayed them into the error of confounding the two systems together, whereby they have rendered their accounts unintelligible. Boetius has erred in this respect ; and Bontempi, a modern Italian, notwithstanding he professes to have followed the Greek writers, more particularly Nicomachus, has made the same mistake ; for in every one of the representations of the improved system of Terpander which he has given, is contained an exhibition of the Synemmenon or conjunct tetrachord, which before the invention of the Diezeugmenon, or disjunct tetrachord, by Pythagoras, could have no existence. He indeed confesses as much when he admits that the distinction imported by its name was rather *potential* than *actual* ; or, as we perhaps should say, rather *contingent* than *absolute*.

† Vincentio Galilei, Dialog. della Musica, pag. 113. Franciscus Salinas de Musica, lib. III. cap. 4.

‡ Bontempi. 51. 52.

* Sir Thomas Browne's Enquiry into Vulgar Errors, 173.

To refute this error it is necessary in some sort to adopt it, and proceed after Bontempi to describe what he calls the first addition to the system of Terpander. His words are nearly these :—

‘To the lyre of seven strings, forming a conjunct tetrachord, were added two tetrachords; the most grave was joined to that tetrachord, which for its gravest, or, to use the modern method of position, its lowest sound, had Hypate, and the most acute tetrachord was joined to that which for its most acute sound, had Nete: the acuter of these two additional tetrachords, from its situation named hyperboleon, proceeded from Nete by three other terms, viz., Trite, Paranete, and Nete, to each whereof was given the epithet Hyperboleon, to distinguish them from the sounds denoted by the same names in the primitive septenary. The other of the additional tetrachords, which began from Mese, was called Synemmenon or conjunct, and proceeded likewise by the same terms of Trite, Paranete, and Nete; and each of these had, for the reason just given, the epithet of Synemmenon, as in the following figure appears:—

ADDITION I. to the SYSTEM of TERPANDER.

System of TERPANDER.	Tetrach. Hyperb.	Nete hyperboleon	g		
		Tone			
		Paranete hyperboleon	f		
	Tetrach. B.	Hemitone			
		Trite hyperboleon	e		
		Tone			
	Tetrach. A.	Nete	d	Nete synemmenon	d
		Tone		Tone	
		Paranete	c	Paranete synemmenon	c
	Tetrach. A.	Tone		Tone	
		Trite	b	Trite synemmenon	b
		Hemitone		Hemit.	
	Tetrach. A.	Mese	a	Mese	a
		Tone			
		Lychanos	G		
	Tetrach. A.	Tone			
		Parhypate	F		
		Hemitone			
	Tetrach. A.	Hypate	E		

It is observable in the above scheme, that between the Synemmenon tetrachord and that marked B, which was originally a part of the system of Terpander, there is not the least difference: the interval of a hemitone between a and b being common to both; of what use then this auxiliary tetrachord was, or how it became necessary to distinguish it by the epithet Synemmenon or conjoined, from that which as yet had never been disjoined, is hard to conceive; the only addition therefore that we consider is that of the Hyperboleon tetrachord, which increased the number of terms to ten, as above is shown: however, after all, as the lyre thus limited to the compass of a musical tenth, reaching from E to g, was not commensurate in general to the human voice, a farther extension of it was found necessary; and another tetrachord was added to this, which began at Hypate in the former system, and proceeded by a repetition of the same terms as that did, with the addition of hypaton. This addition begat also a distinction in the terms of the tetrachord, to which it had been joined; which, to shew their relation to the Mese, had each of them the adjunct of meson, and the

tetrachord to which they belonged was thence called the tetrachord meson. This last addition of the tetrachord Hypaton increased the number of terms to thirteen, in which were included four conjunct tetrachords, the Mese being the seventh from each extreme, and carried the system down to B; though to show that hypate Hypaton was a hemitone below Parhypate or C, the Italians generally denote it by the character h .

ADDITION II. to the SYSTEM OF TERPANDER.

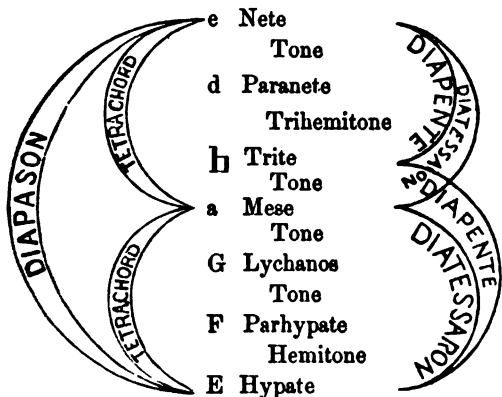
System of TERPANDER.	Tetrach. Hyperb.	Nete hyperboleon	g		
		Tone			
		Paranete hyperboleon	f		
	Tetrach. B.	Hemitone			
		Trite hyperboleon	e		
		Tone			
	Tetrach. A.	Nete	d	Nete synemmenon	d
		Tone		Tone	
		Paranete	c	Paranete synemmenon	c
	Tetrach. A.	Tone		Tone	
		Trite	b	Trite synemmenon	b
		Hemitone		Hemitone	
	Tetrach. A.	Mese	a	Mese	a
		Tone			
		Lychanos meson	G		
	Tetrach. A.	Tone			
		Parhypate meson	F		
		Tone			
	Tetrach. Hypat.	Hypate meson	E		
		Tone			
		Lychanos hypaton	D		
	Tetrach. Hypat.	Tone			
		Parhypate hypaton	C		
		Hemitone			
	Tetrach. Hypat.	Hypate hypaton	b		

In this diagram also the synemmenon Tetrachord is inserted: we forbear to repeat the reasons against connecting it with the system of Terpander, with which it seems absolutely incompatible, and shall hereafter endeavour to shew when and how the invention of it became necessary, and what particular ends it seems calculated to answer. In order to this it must be observed, that the system, improved even to the degree above related, wanted much of perfection: it is evident that the lower sound Hypate hypaton, or as we should now call it, $\text{B}\frac{b}{\flat}$, was a hemitone below C, and that b, which in the order of succession upwards was the eighth term, was a whole tone below the term next above it, consequently it was a hemitone short of a complete musical octave or diapason; to remedy this defect, as also for divers other reasons, Pythagoras is said to have reverted to the primitive system of a septenary, and with admirable sagacity, by interposing a tone in the middle of the double tetrachord, to have formed the system of a Diapason or Octochord.

But before we proceed to relate the particulars of this and other improvements of Pythagoras in music, and the wonderful discovery made by him of the proportions of musical sounds, it may be proper to take notice of two variations in the septenary, introduced by a philosopher, and a disciple of Pythagoras, named Philolaus; the one whereof, for ought we can discover, seems to have been but very inconsiderable, that is to say, no more than an alteration of the term

Mese, which, because that sound was a third distant from Nete, he called Trite; the other consisted in an extension of the diatessaron included between the Mese and Nete to a diapente, by the insertion of a trihemitone between Paramese, or as he termed it, Trite and Paranete; by which the system, though it laboured under the inconvenience of an Hiatus, comprehended the interval of a diapason, the extreme terms whereof formed a consonance much more grateful to the ear than any of those contained in that of Terpander. Nicomachus speaks more than once of Philolaus, and says that he was the first who called that Trite, which before was called Paramese, as being a diatessaron distant from Nete. But although it is certain that he was a contemporary of Pythagoras, we must suppose that this improvement of his to be prior to that of Pythagoras above hinted at; for the latter adopted the appellation of Trite, though by restoring the ancient name Paramese, which he gave to the inserted tone, he altered the situation of it, as will be shown hereafter.

SYSTEM OF PHILOLAUS.



The gradual improvements of this system from the time of Terpander to that of Philolaus having been severally enumerated, and its imperfection noted, we are now to speak of those made by Pythagoras. His regulation of the octave by the insertion of a tone has been just hinted, and it will be necessary to be more particular; but previous to this it is requisite to mention that discovery of his, which though merely accidental, enabled him to investigate the ratios of the consonances, and to demonstrate that the foundations of musical harmony lay deeper than had ever before his time been imagined.

Of the manner of this discovery Nicomachus has given a relation, which Mr. Stanley has inserted in his History of Philosophy in nearly the following terms:—

‘Pythagoras being in an intense thought whether he might invent any instrumental help to the ear, solid and infallible, such as the sight hath by a compass and a rule, and by a Dioptré; or the touch, or by a balance, or by the invention of measures; as he passed by a smith’s shop by a happy chance he heard the iron hammers striking on the anvil, and rendering sounds most consonant to one another in all combinations except one. He observed in

‘them these three concords, the diapason, the diapente, and the diatessaron; but that which was between the diatessaron and the diapente he found to be a discord in itself, though otherwise useful for the making up of the greater of them, the diapente. Apprehending this came to him from God, as a most happy thing, he hastened into the shop, and by various trials finding the difference of the sounds to be according to the weight of the hammers, and not according to the force of those who struck, nor according to the fashion of the hammers, nor according to the turning of the iron which was in beating out: having taken exactly the weight of the hammers, he went straightway home, and to one beam fastened to the walls, cross from one corner of the room to the other, lest any difference might arise from thence, or be suspected to arise from the properties of several beams, tying four strings of the same substance, length, and twist, upon each of them he hung a several weight, fastening it at the lower end, and making the length of the strings altogether equal; then striking the strings by two at a time interchangeably, he found out the afore-said concords, each in its own combination; for that which was stretched by the greatest weight, in respect of that which was stretched by the least weight, he found to sound a Diapason. The greatest weight was of twelve pounds, the least of six; thence he determined that the diapason did consist in double proportion, which the weights themselves did shew. Next he found that the greatest to the least but one, which was of eight pounds, sounded a Diapente; whence he inferred this to consist in the proportion called Sesquialtera, in which proportion the weights were to one another; but unto that which was less than itself in weight, yet greater than the rest, being of nine pounds, he found it to sound a Diatessaron; and discovered that, proportionably to the weights, this concord was Sesquitertia; which string of nine pounds is naturally Sesquialtera to the least; for nine to six is so, viz., Sesquialtera, as the least but one, which is eight, was to that which had the weight six, in proportion Sesquitertia; and twelve to eight is Sesquialtera; and that which is in the middle, between Diapente and Diatessaron, whereby Diapente exceeds Diatessaron, is confirmed to be in Sesquioctava proportion, in which nine is to eight. The system of both was called Diapason,* that is both of the Diapente and Diatessaron joined together, as duple proportion is compounded of Sesquialtera and Sesquitertia; such as are twelve, eight, six, or on the contrary, of Diatessaron and Diapente, as duple proportion is compounded of Sesquitertia and Sesquialtera, as twelve, nine, six, being taken in that order.

‘Applying both his hand and ear to the weights which he had hung on, and by them confirming the proportion of the relations, he ingeniously transferred the common result of the strings upon the cross beam to the bridge of an instrument, which he called *Xopdoton*, *Chordotonos*; and for stretching them proportionably to the weights, he invented

* i. e. per omnes.

'pegs, by the turning whereof he distended or relaxed them at pleasure. Making use of this foundation as an infallible rule, he extended the experiment to many kinds of instruments, as well pipes and flutes, as those which have strings; * and he found that this conclusion made by numbers was consonant without variation in all. That sound which proceeded from the number six he named Hypate; that from eight Mese, being Sesquitertia to the other; that from nine Paramese, it being one tone more acute, and sesquioctave to the Mese; that from twelve he termed Nete; and supplying the middle spaces with proportionable sounds, according to the diatonic genus, he so ordered the octochord with convenient numbers. Duple, Sesquialtera, Sesquitertia, and the difference of the two last, Sesquioctava.

'Thus by a kind of natural necessity he found the progress from the lowest to the highest, according to the diatonic genus; and from thence he proceeded to declare the chromatic and enharmonic kinds.' † *Hist. of Philosophy*, pag. 387. folio edit. 1701.

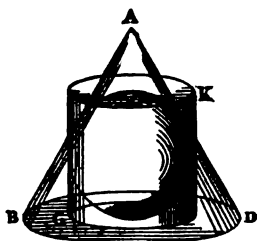
* This seems difficult to conceive, for the tuning of pipes and flutes is regulated by the size and distance of the apertures for the emission of the wind or breath; and to make the proportions of six, eight, nine, twelve, are in no way whatever applicable.

† The result of this discovery is, that consonancy is founded on geometrical principles, the contemplation whereof, and the making them the test of beauty and harmony, is a pleasure separate and distinct from that which we receive by the senses. This geometrical relation of the consonances has been farther illustrated by Archimedes, who has demonstrated that the proportions of certain solid bodies are the same with those of the musical consonances; to speak first of the diapason.

By a corollary from the thirty-fourth proposition of Archimedes it is shewn, that the proportion of the octave is as the whole superficies of a right cylinder described about a sphere, is to the whole superficies of an equilateral cylinder inscribed, that is to say, as 2 is to 1. For the circumscribed is to the spheric superficies as 12 is to 8; but the spheric is to the inscribed as 8 is to 6; therefore the circumscribed is to the inscribed as 12 is to 6, or 2 to 1. Vide Theorems selected out of Archimedes by Andrew Tacquet, printed at the end of Whiston's Euclid.

As to the diatessaron, the proportion of it is precisely the same with that which subsists between the superficies of a sphere and the whole superficies of a square cylinder inscribed therein, viz., 4 to 3. *Ibid.* Prop. xxxiv.

But which is admirable, the sesquialteral proportion of the diapente, and of the same interval continued, is demonstrated by Tacquet himself, by a sphere, a right cylinder, and an equilateral cone thus disposed:—



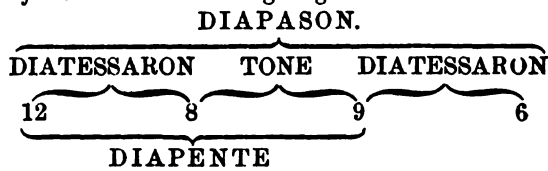
His words are these: 'An equilateral cone circumscribed about a sphere, and a right cylinder in like manner circumscribed about the same sphere, and the same sphere itself continue the same proportion; to wit, the sesquialteral, as well as in respect of the solidity as of the whole superficies.'

'For by 22 of this book, the right cylinder G K encompassing the sphere, is to the sphere, as well in respect of solidity, as of the whole superficies, as 3 is to 2, or as 6 to 4. But by the foregoing, the equilateral cone B A D circumscribed about the sphere, is to the sphere, in both the said respects, as 9 is to 4. Therefore the same cone is to the cylinder, both in respect of solidity and surface, as nine is to six; wherefore these three bodies, a cone, a cylinder, and sphere, are betwixt themselves as the numbers 9, 6, 4; and consequently continue the sesquialteral proportion.' Q. E. D. Prop. xlv. at the conclusion of the Theorems of Archimedes by Tacquet.

Farther the same author shows, that the same sesquialteral proportion holds betwixt an equilateral cone and cylinder circumscribed about the same sphere, in respect of their whole surfaces, their simple surfaces, their solidities, altitudes, and bases.

Archimedes was so delighted with the thirty-second of his propositions, above referred to, that he left it in charge to his friends to erect on his

Other writers attribute the discovery of the consonances to another, named Diocles; who, say they, passing by a potter's shop, chanced to strike his stick against some empty vessels which were standing there; that observing the sounds of grave and acute resulting from the strokes on vessels of different magnitudes, he investigated the proportions of music, and found them to be as above related; ‡ notwithstanding which testimony, the uniform opinion of mankind has been, that we owe this invention to Pythagoras; the result whereof may be conceived by means of the following diagram:—



DIAPENTE

It is observable that there is nothing in this account to authorise the supposition that the lyre of Mercury was tuned in any of those proportions which this discovery had shewn to be consonant. Bontempi, who, as we have hinted before, had his doubts about it, says expressly that none of the Greek writers assert any such matter; and Zarlino, though he adopts the relation of Boetius, does it in such a way as sufficiently shews it stuck with him: we may therefore justly suspect that Boetius went too far in assigning to the strings of the Mercurian lyre the proportions of six, eight, nine, twelve.

CHAP. III.

If we consider the amount of this discovery, it will appear to be, that certain sounds, which the human ear had previously recognised as grateful and harmonious, were, by the sagacity of Pythagoras, found to have a wonderful relation to each other in certain proportions; that those proportions do really subsist between the musical concords above-mentioned is demonstrated by Ptolemy, and will be shown hereafter; but then it has been by experiments of a different kind from that of strings distended by hammers or other weights in the proportion of six, eight, nine, twelve, and such as prove a most egregious error in those said to be made by Pythagoras; so that though his title to the discovery of the proportions above-mentioned is not contested; yet that it was the result of the experiment above related to have been made by him, is demonstrably false.

For suppose, as will be shown hereafter, that the sounds of four strings, in every other respect alike, and in length as these numbers, six, eight, nine, twelve, will make the intervals above-mentioned, viz., a fourth, fifth, and octave; yet let weights in these proportions be hung to strings of equal length and thickness, and the intervals between the sounds produced by a sphere included in a cylinder, and Tacquet seems to have been little less pleased with his improvement on it, for he has given the figure referred to in the demonstration of it, in the title page of his Theorems selected from Archimedes.

‡ Vincent. Galilei, *Dial. della Musica*, pag. 127.

duced by strings thus distended will be far different from those above-mentioned.

It is said that we owe the detection of this error to the penetration and industry of Galileo Galilei, whose merits as well as sufferings are sufficiently known. He was the son of a noble Florentine named Vincentio Galilei, the author of a most learned and valuable work, intitled *Dialogo della Musica antica e moderna*, printed at Florence in 1581 and 1602; and also of a tract, intitled *Discorso intorno all' Opere del Zarlino*; and of his father, who was an admirable performer on the lute, learned both the theory and practice of music; in the latter whereof he is said to have been such a proficient, as to be able to perform to a great degree of excellence on a variety of instruments; however, notwithstanding this his propensity to music, his chief pursuits were natural philosophy and the mathematics. The inquisitiveness of his temper leading him to the making experiments, in the course thereof he made many noble discoveries; that of the telescope seems to be universally attributed to him; his first essay towards an instrument for viewing the planets was an organ pipe with glasses fixed therein; and it was he that first investigated those laws of pendulums, which Mr. Huygens afterwards improved into a regular and consistent theory.

In a work of the younger Galilei, intitled *Discorsi e Dimostrazioni Matematiche intorno, à due nuove Scienze, attenenti alla Mecanica, ed i Movimenti locali*, is contained a detection of that error, which it is here proposed to refute.

It is true some writers refer this discovery to Vincentio Galilei; and first Bontempi says, that in his discourse on the works of Zarlino, he affirms, that in order 'to find the consonances by weights hung 'to chords, the weight to produce the diapason 'ought to be in quadruple proportion; that to produce the diapente ought to be in dupla sesquiquarta; 'for the diatessaron in sesquiseptima partientenono 'and for the tone in sesquiseptima partiente 64.*

Malcolm also, speaking of the discovery of the consonances by Pythagoras, makes use of these words: 'But we have found an error in this account, which 'Vincenzo Galileo, in his Dialogues of the ancient 'and modern Music, is, for what I know, the first 'who observes; and from him Meibomius repeats it 'in his notes upon Nicomachus.†

Here it may be observed, that this author Malcolm has himself been guilty of two mistakes; for first, it is not in his notes on Nicomachus, but in those on Gaudentius that Meibomius mentions the error now under consideration: and farther, in the passage of Meibomius, which Malcolm meant to refer to, the discovery is not ascribed to Vincentio Galilei, but to Galileo Galilei his son. To take the whole together, Gaudentius, speaking of the experiment of Pythagoras, and asserting, that if two equal chords be distended by weights in the same proportion to each other as the terms of the ratio, containing any interval, those chords when struck will give that interval. Meibomius upon this passage remarks in the following words: 'Mirandum sane, hanc experientiam, tot

'gravissimorum auctorum adsertione confirmatam, 'nostro primum seculo deprehensam esse falsam. 'Inventionis gloriam debemus nobilissimo mathematico Galileo Galilei, quem vide pag. 100. Tractatus 'qui inscribitur: Discorsi e Dimostrazioni Matematiche intorno à due nuove Scienze.‡

But notwithstanding Bontempi has given from the elder Galilei a passage which seems to lead to a discovery of the error of Pythagoras, yet he himself acquiesces in the opinion of Meibomius, that the honour of a formal refutation of it is due to the younger, and is contained in the passage above referred to, which translated is as follows:—

'I stood a long time in doubt concerning the forms 'of consonance, not thinking the reasons commonly 'brought by the learned authors who have hitherto 'wrote of music sufficiently demonstrative. They 'tell us that the diapason, that is the octave, is contained by the double; and that the diapente, which 'we call the fifth, is contained by the sesquialter: 'for if a string, stretched upon the monochord, be 'sounded open, and afterwards placing a bridge 'under the midst of it, its half only be sounded, you 'will hear an eighth; and if the bridge be placed 'under one third of the string, and you then strike 'the two thirds open, it will sound a fifth, to that of 'the whole string struck when open; whereupon 'they infer that the eighth is contained between 'two and one, and the fifth between three and two. 'But I do not think we can conclude from hence 'that the double and sesquialter can naturally 'assign the forms of the diapason and diapente; and 'my reason for it is this: there are three ways by 'which we may sharpen the tone of a string, viz., by 'shortening it, by stretching it, or by making it 'thinner: if now, retaining the same tension and 'thickness, we would hear an eighth, we must make 'it shorter by half; i. e., we must first sound the 'whole string, and then its half. But if, keeping the 'same length and thickness, we would have it rise to 'an eighth from its present tone, by stretching it, or 'screwing it higher, it is not sufficient to stretch it 'with a double, but with four times the force: thus, 'if at first it was distended by a weight, suppose of 'one pound, we must hang a four pound weight to 'it, in order to raise its tone to an eighth. And 'lastly, if, keeping the same length and tension, we 'would have a string to sound an eighth, this string 'must be but one fourth of the thickness of that 'which it must sound an eighth to.§ And this that 'I say of the eighth, I would have understood of all 'other musical intervals. To give an instance of the 'fifth, if we would produce it by tension, and in order 'thereto hang to the grave string a four-pound 'weight; we must hang to the acute, not one of six, 'which yet is in sesquialteral proportion to four, viz.,

† Meibom. Not. in Gaudent. pag. 37.

§ Isaac Vossius says that in this passage the author has erred, and with his usual temerity asserts, that ceteris paribus, the thicker the chord, the acuter the sound. De Poemat. Cant. et Viribus Rhythmi, pag. 113. And this, even though he confesses that both Des Cartes and Merennus were of opinion with Galilei in this respect. The only appeal in such a case as this must be to experiment, and whoever will make one for the purpose will find the converse of this proposition to be true, and that, as Galilei has said, chords comparatively thin render acute, and not grave sounds.

* Hist. Music, pag. 54

† Malcolm on Music, pag. 503.

'three to two, but one of nine pounds. And to produce the above intervals by strings of the same length, but different thickness, the proportion between the grave and the acute string must be that of nine to four. These things being really so in fact, I saw no reason why these sage philosophers should rather constitute the form of the eighth double than quadruple, and that of the fifth rather in sesquialtera than in double sesquiquarta, &c.' * *Discorsi e Dimostrazioni Matematiche del Galileo Galilei*, pag. 75.

To give yet farther weight to the above objection, it may be necessary here briefly to explain a doctrine yet unknown to the ancients, viz., that of pendulums, between the vibrations whereof, and those of musical chords, there is an exact coincidence.

Sound is produced by the tremulation of the air, excited by the insensible vibrations of some elastic, sonorous body; and it has been manifested by repeated experiments, that of musical sounds the acute are produced by swift, and the grave by comparatively slow vibrations.† A chord distended by a weight or otherwise, is, with respect to the vibrations made between its two extremities, to be considered as a double pendulum,‡ and as subject to the same laws.

The proportions between the lengths of pendulums, and the number of vibrations made by them, are in an inverse duplicate ratio; so that if the length be quadrupled, the vibrations will be subduplicated; on the contrary, if the length be subquadrupled, the vibrations will be dupled.§

The same proportions hold also with respect to a chord, but with this difference, that in the case of pendulums the ratios are inverse, the greater length giving the fewer vibrations; whereas in that of chords they are direct, the greater tension giving the greater number of vibrations: thus if the tensile power be as one, if that be quadrupled, the number of vibrations is dupled; and the sound produced by the greater power will be duple in acumen to that produced by the lesser. In a word, the same ratios that subsist between the vibrations of pendulums and their respective lengths, are to be found inversely between the vibrations of chords and the powers that distend them: what those ratios are, so far as they

* The reason of these sage philosophers for doing thus, notwithstanding that Galilei could not discover it, seems to be very obvious; they constituted the form of the eighth double because they found it to arise from the division of a chord into two equal parts; and the fifth they found to arise from the division of a chord into five parts, three whereof struck against the remaining two produced that interval: therefore they assigned to it the sesquialtera proportion, 3 to 2. And certainly there needs no better reason for the Pythagorean constitution of the consonances, than that it is founded in the actual division of a chord; and had the followers of Pythagoras rested the matter there, their tenets would have escaped reprehension.

But they say of him that he produced the consonances by chords of equal length and thickness, distended by weights of six, eight, nine, and twelve pounds; Galilei has shewn that this could not be; and from the principles laid down by writers since his time, as also by experiments, it most evidently appears, that to produce the consonances, from chords thus conditioned, weights must be used of a very different proportion from those said to have been taken by Pythagoras.

As to the proportions, there can be no doubt but that they are as above-stated: but the error chargeable on the Pythagoreans is the making the discovery of them the result of an experiment, which must have produced, instead of consonances, dissonances of the most offensive kind.

† Treatise on the natural Grounds and Principles of Harmony, by William Holder. *Passim*.

‡ *Ibid.* xi. 43.

§ *Ibid.* 16.

respect the acuteness or gravity of sound, will shortly be made appear.

In order to apply the doctrine of tensive powers to the question in debate, it is necessary to state the ratios of the several consonances, and those are demonstrated to be as follows, viz., that of the diapente 3 to 2, and of the diatessaron 4 to 3, that of the diapason 2 to 1, and that of the tone 9 to 8; or in other words, a chord being divided into five parts, the sound produced at three of these parts will be a diapente to that produced at two; if divided into seven parts, four of them will sound a diatessaron against the remaining three; and if divided into three parts, two of them make a diapason against the other one: farther, if the chord be divided into seventeen parts, nine of them on one side will sound a sesquioctave tone to the eight remaining on the other. These are principles in harmonics which we may safely assume, and the demonstrations may be seen in Ptolemy's description of the nature and use of the Harmonic Canon.||

It is equally certain, and is deducible from the doctrine of pendulums, that if two chords, of equal lengths, A B be so distended as that their vibrations shall be as three to two, that is, that A shall make three vibrations while B is making two, the consonance produced by striking them together will be a diapente.

If the vibrations be as four to three, the consonance will be a diatessaron.

If the vibrations be as two to one, the consonance will be a diapason; and lastly—

If the vibrations be as nine to eight, the interval will be a sesquioctave tone.

We are now to enquire what are the degrees of tensive power requisite to produce the vibrations above-mentioned; and here we must recur to the principle above laid down, that the squares of the vibrations of equal chords are to each other as their respective tensions: if then we suppose a given sound to be the effect of a tension by a weight of six pounds, and would know the weight necessary to produce the diapente, which has a ratio to its unison of 3 to 2, we must take the square of those numbers 9 to 4, and seek a number that bears the same ratio to six, as nine does to four, and this can be no whole number, but is thirteen and a half.

By the same rule we adjust the weight for the diatessaron, 4 to 3, which numbers squared are sixteen and nine, and as 16 is to 9, so is $10\frac{2}{3}$ to 6.

For the diapason 2 to 1, which numbers squared are 4 to 1, the weight must be twenty-four; so as 4 is to 1, so is 24 to 6.

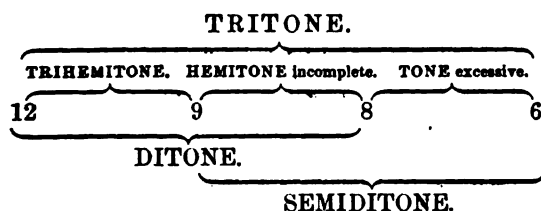
The several weights above adjusted, have a reference to the unison expressed in the scheme of Pythagoras, by the number six, supposed to result from a tension of six pounds. But the sesquioctave tone, as it is the difference between the diapente and diatessaron, takes its ratio from the sound expressed by

|| Mersennus recommends for the purpose of making these experiments, the use of two chords rather than one, for this reason, that where one only is taken, only one sound can be heard at a time; whereas when two are used, both sounds are heard at the same instant, and thereby the consonance is perceived. *Harmonie universelle, Traité des Instrumens*, Prop. v.

the number eight, as the diapente does from that expressed by nine; in order then to adjust the weight for this interval, we must square those numbers; and as 81 is to 64, so is $13\frac{1}{4}$ to 10 $\frac{1}{2}$.

Whoever is disposed to prove the truth of these positions, and doubts the certainty of numerical calculation, may have recourse to experiment; in which, however, this caution is to be observed, that in the making it the utmost degree of accuracy is necessary; for it should seem that one of the authors above-cited failed in an attempt of this sort, which is not to be wondered at, if we consider the nature of the subject.

The author here meant is Bontempi; who, after citing the authority of Vincentio and Galileo Galilei, adds, that, 'prompted by curiosity, he made an experiment by hanging weights to strings of equal lengths and thickness, the result whereof was, that the first and second strings, having weights of 12 and 9, produced not the diatessaron, but the trihemitone; the first and third 12, 8, not the diapente but the ditone; the first and fourth, 12, 6, not the diatessaron but the tritone; the second and the third, 9, 8, not the tone, but the defective or incomplete hemitone; the second and fourth, 9, 6, not the diapente, but the semiditone; and the third and fourth, 8, 6, not the diatessaron, but the distended or excessive tone, as the following figure demonstrates:—'



But that the proportions of a diatessaron tone and diatessaron would result from an experiment made by strings of several lengths of twelve, nine, eight, six; or rather by a division of the monochord, according to that rule, is demonstrable. This invention of Pythagoras, as it regarded only the proportions or ratios of sounds, was applicable to no one system in

particular; however it produced a discovery, which enabled him at once to supply a defect in even the improved system of Terpander, and lay a foundation for that more enlarged one, which is distinguished by his name, and has never since his time been capable of any substantial improvement. We are here to remember that the diatessaron or octave had been found to consist in duple proportion, or in the ratio of 12 to 6; and that the interval between the diatessaron twelve, nine, and that other eight, six, viz., nine, eight, was a complete tone, or sesquioctave ratio. Pythagoras, in consequence of this discovery recurring to the ancient septenary, found that its extremes were discordant, and that there wanted but little to produce that supremely sweet concord the diatessaron, which the means above had enabled him to investigate. Observing farther that in the septenary the interval between Mese and Paramese was but a hemitone, he immediately interposed between them a whole tone, and thereby completed the diatessaron.

It must be confessed that some authors have in general terms ascribed the addition of an eighth string to the heptachord lyre to others; Boetius gives it to Licaon, and Pliny to Simonides; but Nicomachus, from whom the following relation is taken, does most expressly attribute it to Pythagoras.

History has also transmitted to us the bare names of sundry persons, by whom at different times the strings of the lyre are said to have been increased to eighteen in number; as Theophrastus, who added a ninth: Hestius, who added a tenth, and so on;† but as to the ratio subsisting between them, or any system to which they could be said to be adapted, there is a total silence. Indeed we have the greatest reason to think that these additions were not made in any ratio whatever, but served only to increase the variety of sounds‡. That innovations were made in the heptachord is certain; and when we are informed that Timotheus, for his presumption in adding to the strings of the ancient lyre, had a fine imposed on him by the magistracy, we may fairly conclude that those innovations tended rather to the corruption than the improvement of music.

But the case is different with respect to him of whom we are now speaking; the system of Pythagoras had its foundation in nature: the improvement of an instrument was not his care; he was a philosopher and a musician in the genuine sense of the word, and proposed nothing less than the establishment of a theory to which the practice of succeeding ages should be accommodated. His motives for attempting it, and in what manner he effected this great purpose, shall now be given in the words of his learned biographer:—

'Pythagoras, lest the middle sound by conjunction being compared to the two extremes, should render the diatessaron concent both to the Nete and the Hypate; and that we might have a greater variety, the two extremes making the fullest concord each to other, that is to say, a diatessaron, which

* Egli è cosa da restar confuso, e formare un cumulo di maraviglie, che questo sperimento, confermato da gravissimi autori, e tenuto tanti secoli per vero sia stato finalmente scoperto esser falso da Galileo Galilei, siccome riferisce ne' suoi Discorsi e Dimostrazioni Matematiche, e Vincenzo Galilei nel discorso intorno all' opere del Zarlino afferma, che per ritrovare co' pesi attaccati alle corde le consonanze di Martelli; per la diatessaron debbono costituirsi i pesi in quadrupla proporzione; per la diapente, in duple sesquiquarta; per la diatessaron, in sesqui 7 partiente 9; e pe' l' tuono, in sesqui 7 partiente 64. E noi, spinti dalla curiosità messo in opera questo sperimento co' pesi de Martelli, habbiamo ritrovato che il primo ed il secondo 12, 9, partoriscono non la diatessaron: ma il trihemitono; il primo ed il terzo, 12, 8, non la diapente: ma il ditone; il primo e' l' quarto 12, 6, non la diatessaron: ma il tritone; il secondo e' l' terzo 9, 8, non il tuono: ma l'hemitono rimesso o mancante; il secondo e' l' quarto 9, 6, non la diapente: ma il semiditone; ed il terzo e' l' quarto 8, 6, non la diatessaron: ma il tuono disteso vero eccedente, siccome la ottoposta figura dimostra. Bontempi, pa. 54.

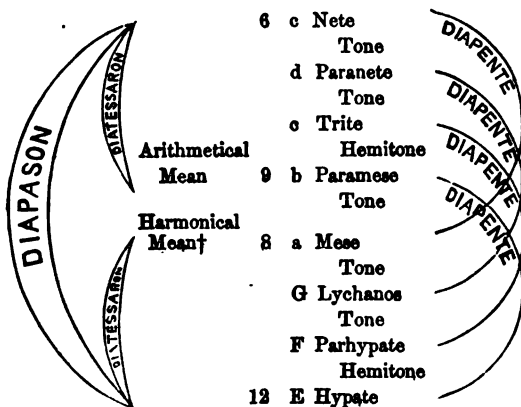
Ptolemy observes, that it is extremely difficult to find chords perfectly equal in respect of crassitude, density, and other qualities that determine their several sounds; and farther he says, that the same chord distended by the same weights, will at different times yield different sounds. Ptolem. Harmonicor. lib. 1. cap. 8. Ex vers. Wallia. Mersenn. Harm. universelle, Traité des Instrumens, Prop. iv. So that the success of experiments for investigating the consonances, by the means of weights hung to chords, must be very precarious, and is little to be depended on.

† Boetius de Musica, lib. II., cap. 20. Vincen. Galilei, Dial. della Musica, pag. 116.

‡ Nicom. lib. II. Boet. lib. I., cap. 20. Bont. pag. 71.

'consists in duple proportion, inserted an eighth sound between the Mese and the Paramese, placing it from the Mese a whole tone, and from the Paramese a semitone; so that what was formerly the Paramese in the heptachord, is still the third from the Nete, both in name and place; but that now inserted is the fourth from the Nete, and hath a consent to it of diatessaron, which before the Mese had to the Hypate: but the tone between them, that is the Mese, and the tone inserted, called the Paramese, instead of the former, to whichever tetrachord it be added, whether to that which is at the Hypate, being the lower, or to that of the Nete, being the higher, will render the concord of diapente; which is either way a system, consisting both of the tetrachord itself, and of the additional tone: and as the diapente proportion, viz., sesquialtera, is found to be a system of sesquitercia and sesquioctava, the tone therefore is sesquioctava. Thus the interval of four chords, and of five, and of both conjoined together, called diapason, with the tone inserted between the two tetrachords, completed the octochord.*'

SYSTEM OF PYTHAGORAS.



It remains now to enquire what this variation of and addition to the septenary led to. Pythagoras immediately after he had adjusted his system of the octochord in the manner above related, transferred to it the additions which had been made to that of Terpander; and first he connected with it the tetrachord hypaton, which carried the system down to B, and placing at the other extremity the hyperboleon tetrachord, he continued it up to a a, as is here shewn.

* Stani. Hist. of Philosophy, pag. 386, from Nicom. lib. I.

† The difference between the arithmetical and harmonical division of the diapason is explained in a subsequent chapter. But as this division is frequently occurring, it may not be improper here to remark in general that the numbers 12, 9, 6, express the arithmetical, and 12, 8, 6, the harmonical division.

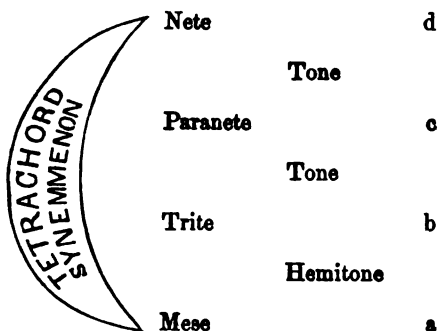
GREAT SYSTEM OF PYTHAGORAS.

Lesser System of PYTHAGORAS.	Tetrachord B.	Nete hyperboleon	Tone	aa
		Paranete hyperboleon	Tone	g
		Trite hyperboleon	Hemitone	f
		Nete diezeugmenon	Tone	e
		Paranete diezeugmenon	Tone	d
		Trite diezeugmenon	Hemitone	c
	Tetrachord A.	Paramese	Tone	b
		Mese	Tone	a
		Lychanos meson	Tone	G
		Parhypate meson	Hemitone	F
		Hypate meson	Tone	E
		Lychanos hypaton	Tone	D
Tetrach. Hypat.	Tetrach. Hypat.	Parhypate hypaton	Hemitone	C
		Hypate hypaton	Hemitone	b

In consequence of the separation of the system of the octochord above noted, we see that in the above diagram the tetrachord B is separated from the tetrachord A by a whole tone: this disunion of the one diatessaron from the other, gave rise to the epithet of Diezeugmenon or disjunct, whereby the former of the two tetrachords is distinguished: we are therefore now to look for the invention of that other tetrachord, which hitherto has been represented as part of a system, to which it could never with any propriety be applied.

No one in the least acquainted with the principles of harmony need be told, that that relation which modern musicians denominate a Tritonus, can have no place in any regular series of progression, either ascending or descending; for of the effects of sounds produced at the same instant we are not now speaking: that such a relation immediately arose from the separation of the Diezeugmenon and Meson tetrachords, will appear by observing that in the progression upwards through the Meson tetrachord, beginning at Parhypate Meson, and proceeding to Paramese, that interval which should be a diatessaron, and consist of two tones and a hemitone, will contain three tones, and have for its ultimate sound what in this place is to be considered as an excessive fourth.† The consequence of this was, that the lower sound could never be used as a fundamental; and so far the system must be said to have been imperfect. To remedy this defect in part, collateral or auxiliary tetrachord was with great ingenuity constituted, in which the sounds followed in the order of hemitone, tone, and tone, a succession which a true and perfect diatessaron requires.

† Some writers have given the name of Tritonus to the defective fifth, $\sharp f$, for this reason, that it is an interval compounded of hemitone, tone, and hemitone, the sum whereof is three tones. But in this they are mistaken, for the ratios of the tritonus or excessive fourth, and the semidiapente or defective fifth are different, the one being 45 to 32, the other 64 to 45. Vide Mercennus Harmonic. De Dissonantia, pag. 75. Holder on the natural Grounds and Principles of Harmony, pag. 138.



The intervals that compose this system will appear upon comparison to be precisely the same with those of the tetrachord B, in the conjunct system; whereas between the tetrachord B, in the disjunct system, and that at present under consideration, this difference is apparent; in the former the distance between a and b is a whole tone, in the latter it is a hemitone: if therefore this question should be asked, Wherein did the merit of the improvements made by Pythagoras to the ancient system consist? the answer would be, first, in the invention of the disjunct system, and the consequent completion of the octochord; next in the introduction of the octochord into the system of Terpander; and lastly, in such a disposition of the disjunct tetrachord as was yet consistent with the re-admission of that part of the system which it seems to exclude whenever the perfection of the harmony should require it. After what has been said it will be needless to add that this collateral tetrachord was distinguished by the epithet of Synemmenon or conjunct. With these improvements the Pythagorean system assumed the following form:—

ADDITION to the GREAT SYSTEM of
PYTHAGORAS,

Lower system of PYTHAGORAS.	Tetrach. B.	Tetrach. hyperb.	Nete hyperboleon	aa		
			Tone			
			Paranete hyperboleon	g		
	Tetrach. B.	Tetrach. disj.	Tone			
			Trite hyperboleon	f		
			Hemitone			
	Tetrach. A.	Tetrach. meson	Nete diezeugmenon	e		
			Tone			
			Paranete diezeugmen.	d	Nete synemmenon	d
	Tetrach. hypat.	Tetrach. hypat.	Tone			
			Trite diezeugmenon	c	Paranete synemmenon	c
			Hemitone			
	Tetrach. meson A.	Tetrach. meson A.	Paramese	b	Trite synemmenon	b
			Tone		Hemitone	a
			Mese	a	Mese	
	Tetrach. hypat.	Tetrach. hypat.	Tone			
			Lychanos meson	G		
			Tone			
Tetrach. hypat.	Tetrach. hypat.	Parhypate meson	F			
		Hemitone				
		Hypate meson	E			
Tetrach. hypat.	Tetrach. hypat.	Tone				
		Lychanos hypaton	D			
		Tone				
Tetrach. hypat.	Tetrach. hypat.	Parhypate hypaton	C			
		Hemitone				
		Hypate hypaton	b			

There were two reasons that seemed to suggest

a still farther improvement; the one was that by the separation of the Diezeugmenon and Meson tetrachords there followed an unequal division of the system; for, ascending from Mese to Nete Hyperboleon, the distance was a complete Octave; whereas descending to Hypate Hypaton it was only a Seventh: from hence arose another inconvenience, a false relation between Hypate Hypaton and Parhypate Meson, which though to appearance a fifth, was in truth an interval of only two tones and two hemitones, constituting together the very discordant relation of a defective fifth. To supply this defect nothing more was required than the addition of a tone at the lower extremity of the system. Pythagoras accordingly placed another chord at the distance of a tone below Hypate Hypaton, which he named Proslambanomenos, a word signifying additional or supernumerary, it not being includable in the division of the system by tetrachords; and thus was completed that system of a Biadiapason or double octave, which the Italians distinguished by the several appellations of Systema immutabile, Systema diatonico, Systema Pitagorico, and Systema massimo.

IMMUTABLE SYSTEM OF PYTHAGORAS.

Lower System of PYTHAGORAS.	Tetrach. B.	Tetrach. hyperb.	Nete hyperboleon	aa		
			Tone			
			Paranete hyperboleon	g		
	Tetrach. B.	Tetrach. hyperb.	Tone			
			Trite hyperboleon	f		
			Hemitone			
	Tetrach. B.	Tetrach. hyperb.	Nete diezeugmenon	e		
			Tone			
			Paranete diezeug.	d	Nete synemmenon	d
	Tetrach. B.	Tetrach. hyperb.	Tone		Tone	
			Trite diezeugmenon	c	Paranete synem.	c
			Hemitone		Tone	
	Tetrach. B.	Tetrach. hyperb.	Paramese	b	Trite synemmenon	b
			Tone		Hemitone	
			Mese	a	Mese	a
	Tetrach. B.	Tetrach. hyperb.	Tone			
			Lychanos meson	G		
			Tone			
	Tetrach. B.	Tetrach. hyperb.	Parhypate meson	F		
			Hemitone			
Hypate meson			E			
Tetrach. B.	Tetrach. hyperb.	Tone				
		Lychanos hypaton	D			
		Tone				
Tetrach. B.	Tetrach. hyperb.	Parhypate hypaton	C			
		Hemitone				
		Hypate hypaton	b			
Tetrach. B.	Tetrach. hyperb.	Tone				
		Proslambanomenos	A			

Here it is to be observed, that although in this and the preceding scale the Synemmenon tetrachord is given at large, yet the generality of writers either insert it entire in its place, immediately above the Meson tetrachord, placing the Diezeugmenon tetrachord above it, as Kircher in his Musurgia, tom. I. lib. III, cap. xiii. or else following perhaps the example of Guido, whose reformation of the scale might suggest this latter method as the most concise, they have borrowed from the synemmenon tetrachord one only of its terms, Trita, and inserted it immediately after Mese, with Paramese next above it; thereby leaving it to the imagination to select which

of the two sounds the nature of the progression might require; however, the better to explain its construction and use, it was here thought proper to exhibit the synemmenon tetrachord in that detached situation which seems most agreeable to its original formation.*

CHAP. IV.

But here it may very naturally be asked what were the marks or characters whereby the ancients expressed the different positions or powers of their musical sounds? An answer to this question may be produced from an author of undoubted credit, Boetius, and also Alypius, an ancient Greek, of whose writings we shall have occasion to speak more particularly, and these inform us that the only characters in use among the Greeks to denote the sounds in music, were the letters of their alphabet, a kind of Brachygraphy totally devoid of analogy or resemblance between the sign and the thing signified. Boetius de Musica, lib. IV., cap. iii., gives an account of the ancient method of notation in the following words:—‘The ancient musicians, to avoid the necessity of always writing them at length, invented certain characters to express the names of the chords in their several genera and modes; this short method was the more eagerly embraced, that in case a musician should be inclined to adapt music to any poem, he might, by means of these characters, in the same manner as the words of the poem were expressed by letters, express the music, and transmit it to posterity. Out of all these modes we shall only specify the Lydian.’ This description of the sounds consisted in the different application of the Greek letters to each of them; Boetius proceeds thus:—‘To express Proslambanomenos, which may be called Acquisitus, was used Z imperfect, and tau-lying τ . Hypate hypaton, Γ reversed and Γ right Γ . Parhypate hypaton, B imperfect Γ supine, Γ Hypaton enarmonios, V supine and Γ reversed, having a stroke Γ . Hypaton chromatic, ∇ , having a line and Γ reversed, having two lines ∇ . Hypaton diatonos, ϕ Greek, and digamma ϕ . Hypate meson C and C, $\frac{C}{C}$. Parhypate meson P and C supine $\frac{P}{C}$. Meson enarmonios, Π Greek and C reversed. $\frac{\Pi}{C}$. Meson chromatic, Π having a stroke, and C reversed, having a stroke through the middle Π . Meson diatonos, M Greek and Π drawn open $\frac{M}{\Pi}$. Mese, I and A lying, $\frac{I}{A}$. Trita synemmenon, Θ and A supine $\frac{\Theta}{A}$. Synemmenon enarmonios, H Greek and A lying, with a stroke through the middle $\frac{H}{A}$.

‘Synemmenon chromatic, H Greek and A reversed with a stroke $\frac{H}{A}$. Synemmenon diatonos, Γ and N $\frac{N}{\Gamma}$. Nete synemmenon, Ω supine and Z, $\frac{\Omega}{Z}$. Paramese, Z and Γ Greek lying $\frac{Z}{\Gamma}$. Trita diezeugmenon, E square and Γ supine $\frac{E}{\Gamma}$. Diezeugmenon enarmonios, Δ and Γ Greek lying reversed $\frac{\Delta}{\Gamma}$. Diezeugmenon chromatic, Δ with a stroke, and Π Greek lying reversed with an angular line $\frac{\Delta}{\Pi}$. Diezeugmenon diatonos, Ω square and Z, $\frac{\Omega}{Z}$. Nete diezeugmenon, ϕ lying and N inverted draw open $\frac{\phi}{N}$. Trita hyperboleon, Γ looking downwards to the right, and half A to the left $\frac{\Gamma}{A}$. Hyperboleon enarmonios, T supine and half A to the right supine, $\frac{T}{A}$. Hyperboleon chromatic, T supine. having a line and half A to the right supine, having a line drawn backward $\frac{T}{A}$. Hyperboleon, diatonos M Greek having an acute, and Γ having an acute $\frac{M}{\Gamma}$. Nete hyperboleon, I having an acute, and A lying having an acute also $\frac{I}{A}$.

Here it is to be remarked, that although the above passage of Boetius is given, not from any of the printed copies of his works, but from a very ancient manuscript, which Mr. Selden collated, and is prefixed to Meibomius's version of Alypius: there occur in it some instances of disagreement between the verbal description of the character and the character itself; some of these Meibomius in his notes has remarked, and others have escaped him; nevertheless it was not thought advisable to vary the representation which Boetius has given, and therefore the following scheme of the ancient musical characters is inserted, as he has delivered it in lib. IV. cap. iii. of his book De Musica.

† Boetius as he goes along gives the Latin signification of the Greek names, which it was thought proper to omit in order to make room for an extract from Kircher to the same purpose, wherein the Latin are opposed to the Greek names in the order in which they arise in the several tetrachords:—

	aa Nete hyperboleon, sive ultima acuturum.
Tetrachordon	g Paranete hyperboleon, sive secunda acuturum.
Neton	f Trita hyperboleon, sive tertia acuturum.
	e Nete, sive ultima disjuncturum.
Tetrachordon	d Paranete diezeugmenon, sive secunda disjuncturum.
Diezeugm.	c Trita diezeugmenon, sive tertia disjuncturum.
	b Paramese, sive vicina mediis.
Tetrachordon	d Nete synemmenon, sive ultima conjuncturum.
Synemmen.	c Paranete synemmenon, sive secunda conjuncturum.
	b Trita synemmenon, sive tertia conjuncturum.
	a Mese, id est media.
Tetrachordon	G Lychanos meson, sive index mediarum.
Meson	F Parhypate meson, sive secunda mediarum.
	E Hypate meson, sive gravis mediarum.
Tetrachordon	D Lychanos hypaton, sive index gravium.
Hypaton	C Parhypate hypaton, sive secunda gravium.
	B Hypate hypaton, sive gravis gravium.
	A Proslambanomenos, sive vox assumpta.

* Mercenn. Harmon. lib. vi. De Generibus et Modis, pag. 100.

	Proslambanomenos		Lychanos meson diaton.		Paranete diezeug. enarm.
	Hypate Hypaton		Mese		Paranete diezeug. chrom.
	Parhypate Hypaton		Trite synemmenon		Paranete diezeug. diat.
	Lychanos hyp. enarm.		Paranete synem. enarm.		Nete diezeugmenon
	Lychanos hyp. chrom.		Paranete synem. chrom.		Trite hyperboleon
	Lychanos hyp. diat.		Paranete synem. diaton.		Paranete hyperb. diaton.
	Hypate meson		Nete synem. extenta		Paranete hyperb. chrom.
	Parhypate meson		Nete synem. ultima		Paranete hyperb. diaton.
	Lychanos meson enarm.		Paramese		Nete hyperboleon
	Lychanos meson chrom.		Trite diezeugmenon		

There is this remarkable difference between the method of notation practised by the ancients, and that now in use, that the characters used by the former were arbitrary, totally destitute of analogy, and no way expressive of those essential properties of sound, gravity and acuteness; which is the more to be wondered at, seeing that in the writings of the ancients the terms *Acumen* and *Gravitas* are perpetually occurring, whereas the modern scale is so adjusted, that those sounds, which in their own nature are comparatively grave or acute, have such a situation in it, as does most precisely distinguish them according to their several degrees of each; so that the graver sounds have the lowest, and the acuter the highest place in our scale. But here it may be asked, does this distinction of high and low properly belong to sound, or do we not borrow those epithets from the scale in which we see them so posited? It should seem that we do not; for if we attend to the formation of sounds by the animal organs, we shall find that the more grave are produced from the lower part of the larynx, as the more acute are from the higher; so that the difference between the one and the other seems to be more than ideal, and to have its foundation in nature: the modern musicians seem however to pay a greater regard to this diversity than is either requisite or proper; for where is the necessity that in a vocal composition such a sentiment as this, 'They that go down to the sea in ships,' &c. should be expressed by such sounds, as for the degree of gravity few voices can reach? much less can we see the reasonableness of that precept which directs that the words *Hell*, *Heaven*, are invariably to be expressed, the one by a very grave, and the other by a very acute sound. Those who affect to be severely critical on the compositions of this later age, allow no greater merit to this sort of analogy than is due to a pun, and their censure seems to be no more than the error will warrant.

The description above given of the ancient musical characters, is derived, through Boetius, from Alypius, the most copious and intelligible of all the Greek writers on this branch of music: his authority, so far as it goes, has been implicitly acquiesced in; and indeed from his testimony there can lye no appeal. The reader will naturally expect to be informed of the method by which the ancients denoted the different degrees in the length or duration of their musical sounds; but it seems they were strangers to music merely instrumental: the lyre, and other instruments in use among them, was applied in aid of the voice; and the ode, or hymn, or pean, or whatever else the musician sang, determined by its measure, and the feet of the verse the length of the sound adapted to it, and took away the necessity for such marks or characters of distinction in this respect as are used by the moderns. Nor need we any farther proof of this assertion, than the absolute silence of the Greek writers as to any method of denoting what we now understand by the Time or measure of sounds. It is true that those among the learned who have undertaken a translation of some few remaining fragments of ancient music into modern notes, have, in particular instances, ventured to render the characters in the original by notes of different lengths; but it is to be presumed they were determined so to do rather by the cadence of the verse, than by any rythmical designation observable in any of those characters. Mr. Chilmead, the publisher of the Oxford edition of *Aratus*, and of *Eratothenes de Astris*, in octavo, 1672, has given at the end of it three hymns or odes of a Greek poet named *Dionysius*, with the ancient musical characters, which he has rendered by semibreves only; but *Kircher*, in his *Musurgia*, tom. I. pag. 541. from a manuscript in the library of the monastery of *St. Salvator*, near the gate of *Messina*, in *Sicily*, has inserted an ancient fragment of *Pindar*, with the musical notes, which he has explained by the different signs of a breve,

semibreve, crotchet, and quaver, as understood by us moderns. Meibomius also has given from an ancient manuscript a *Te Deum*, with the Greek characters, and in modern notes, the former of which appear to be more simple and less combined than those described by Boetius; which is the less to be wondered at considering that St. Ambrose, who is said to have been the author of that hymn,* was consecrated bishop of Milan, A. C. 374, and Boetius flourished not till about the year 500; so that there is a period of more than one hundred years, during which every kind of literature suffered from the rage of conquest that prevailed throughout all Europe, to induce a suspicion that the Greek characters were not transmitted down to the time of Boetius uncorrupted. In the translation of these musical characters of the above-mentioned *Te Deum*, Meibomius has made use of the breve, the semibreve, and minim: upon what authority those several modes of translation is founded we do not pretend to determine; it seems that nothing is wanting to enable us to judge with certainty in this matter but a perfect knowledge of the powers of the ancient characters, with respect to the sounds which they were intended to signify; and concerning these Kircher seems to have entertained no kind of doubt: he had access to two manuscripts of great antiquity, and his judgment of their authority, and the use that may be made of them, he has given in the following words:—‘The ancient musical characters were no way similar to those of the moderns; for they were certain letters, not indeed the pure Greek ones, but those sometimes right, sometimes inverted, and at others mutilated and compounded in various manners, each of which characters answered to one of the chords in the musical system. I laid my hands on two manuscripts, which by God’s mercy, were preserved from the injuries of time, the one in the Vatican library, the other in ours of the Roman college: the author is Alypius; he, in order to give the harmonical characters of the ancients in great perfection, has exhibited with wonderful care every tone in the Octodecachord, according to the different genera. He keeps a twofold order in these several characters; the first as they were used in the Cantus; the second as adapted to instruments, differing from the former almost after the same manner as at this day the notes of vocal music do from those characters called by us the *Tablature*, which are used only in instrumental music. Several writers, not understanding this order of Alypius, have considered this twofold series as a single one: among these are Liardus, and Solomon de Caux, who has followed him, both of whom have given to the world most false and corrupted specimens of ancient music. Alypius wrote an entire volume on the musical characters or notes, which, together with other manuscripts of the old Greek musicians,

‘remain preserved in the library of the Roman college; a translation of this volume into the Latin language, I will, with the permission of God, at a convenient opportunity give to the learned world; in the interim I trust I shall do a favour to posterity by exhibiting a specimen of the characters in the order in which they lie in the manuscript, correcting from the interpretations thereto annexed such errors as I found required it.’†

The specimen, the whole of which seems by his account to be taken from Alypius, contains the characters through all the fifteen tones in the diatonic and chromatic genera in two separate tables. (See Appendix, Nos. 35 and 36.)

Kircher gives the following explanation of these characters:—

The top of the plate contains the names of the fifteen tones or modes: the side exhibits eighteen chords, answering to every tone, and expressed by their Greek names, to each of which, the Guidonian keys now used by the Latins answer, in the first column. To know therefore, for instance, by what characters the ancients expressed the *Mese* in the Phrygian tone, we must look in the side for the chord *Mese*, and on the top for *Tonus Phrygius*, and where they meet we shall find the character sought for, and so for the rest.

Having exhibited this key to the ancient characters, Kircher gives the fragment of Pindar above-mentioned in the Greek notes, and also in those of the modern scale, as is represented. (See Appendix, No. 37.)

And the tables (35 and 36) given from him seem to have been his authority for rendering the ancient characters in modern notes, as shewn in 37. By way of illustration he adds, that the *Chorus vocalis* contains the characters written over each word; and that the *Chorus instrumentalis*, which is nothing else but the antistrophe to the former, was played according to the strophe, on the *cythara* or the pipe. As the characters agree with those of Alypius, he says he has no doubt about their meaning; and as to the time, he is clear that it was given by the measures of the syllables, and not by the characters.

The several variations of the system of music have been traced with as much accuracy as the nature of the subject will allow of: the improvements made by Terpander and others, more especially Pythagoras, have been distinctly enumerated, we are therefore now to proceed in our narration.

Pythagoras having, as has been related, investigated the proportion of sounds, and extended the narrow limits of the ancient system, and also demonstrated, not merely the affinity of sounds, but that a harmony, analogous to that of music, was to be found in other subjects wherein number and proportion were concerned; and that the coincidences of sounds were

* The *Te Deum* is commonly styled the Song of St. Ambrose, and it is said that it was composed jointly by him and St. Augustine, upon occasion of the baptism of the latter by St. Ambrose. Alliance of Divine Offices, by Hamon L’Estrange, folio, 1690, pag. 79. But archbishop Usher ascribes it to Nicetius, and supposes it not to have been composed till about the year 500, which was long after the time of Ambrose and Augustine. Ibid.

† It seems by this that Alypius had not been published in Kircher’s time; and though he here promises to give the world a translation of it, there is no other extant than that very correct one of Meibomius. Kircher expresses a confidence that by publishing these characters he should confer an obligation on the learned world, but the manner in which he has done it, furnished a ground of censure to Meibomius, which he delivers in very bitter terms in the preface to his edition of the Greek writers.

a physical demonstration of those proportions which arithmetic and the higher geometry had till then enabled mankind only to speculate, it followed that music from thenceforth became a subject of philosophical contemplation. Aristotle, by several passages in his writings now extant, appears to have considered it in this view: it is even said that he wrote a treatise professedly on the subject of music, but that it is now lost.

Fabricius has given a catalogue of sundry writers, as namely, Jades, Lasus Hermionensis, Mintanor, Diocles, Hagiopolites, Agatho, and many others, whose works are lost; and in the writings of Aristoxenus, Nicomachus, Ptolemy, Porphyry, Manuel Bryennius, and other ancient authors, we meet with the names of Philolaus, Eratosthenes, Archytas of Tarentum, and Didymus of Alexandria, who seem mostly to have been philosophers; but as they are also enumerated among the scriptores periti, nothing can be said about them. In those early times the principles of learning were very slowly disseminated among mankind, and it does not appear, that from the time of Pythagoras, to that of Aristoxenus, which included a period of near three hundred years, the music of the ancients underwent any very considerable alteration, unless we except that new arrangement and subdivision of the parts of the great system, which constituted the Genera, and those dissimilar progressions from every sound to its diapason, which are distinguished by the name of Modes. Of these it is necessary now to speak; and first of the Genera.

Till the time of Pythagoras, the progression of sounds was in that order, which as well the modern as the ancient writers term the diatonic, as proceeding by tones, a progression from the unison to its fourth by two tones and a hemitone, which we should now express by the syllables DO, RE, MI, FA, confessedly very natural and extremely grateful to the ear; though it seems not so much so as to hinder succeeding musicians from seeking after other kinds of progression; and accordingly by a different division of the integral parts of each of the tetrachords, they formed another series of progression, to which, from the flexibility of its nature, they gave the epithet of Chromatic, from Chroma, a word signifying colour; and to this they added another, which was termed enharmonic; besides this they invented a subvariation of each progression, and to distinguish the one from the other, they made use of the common logical term genus, by which we are to understand, as Kircher tells us, tom. I. lib. III. cap. xiii. a certain constitution of those sounds that compose a diatessaron, or musical fourth; or, in other words, a certain relation which the four chords of any given tetrachord bear to each other. The Genera are elsewhere defined, certain kinds of modulation arising from the different disposition of the sounds in a tetrachord: every Cantus or composition, says Aristoxenus,* is either Diatonic, Chromatic, or Enharmonic; or it may be mixed, and include a community of the genera. Aristoxenus, for aught now discoverable,

is the first that has written professedly, though obscurely, on this part of music. Ptolemy, as he is in general the most accurate and methodical of all the ancient writers, so is he more copious in his explanation of the Genera. Nicomachus has mentioned them, but in a very superficial manner; and as to the latter authors, we are not to wonder if they have contented themselves with the bare enumeration of them; since before the times in which the greater number of them wrote, the Diatonic was the only one of the three genera in common use. Nor does it anywhere appear, that even of the five Species, into which that Genus was divided, any more than one, namely, the syntonous or intense of Ptolemy, was in general estimation. It must be confessed that no part of the musical science has so much divided the writers on it as this of the genera; Ptolemy has exhibited no fewer than five different systems of general harmony, and, after all, the doctrine on this subject is almost inscrutable: however, the substance of what these and other authors have related concerning the nature of it, is here, as in its proper place, referred to the consideration of such as are desirous to know the essential difference between the music of this and the more early ages.

But before this doctrine of the Genera can be rendered to any degree intelligible, it is necessary to observe, that hitherto we have spoken only of the more common and obvious musical intervals, the tone and hemitone; for the system of Pythagoras is formed of these only; and a more minute division of it was not till after his time thought on, nevertheless it is to be noted, that in order to the completion of his system, it was found requisite to institute a method of calculation that should as it were resolve the intervals into their elements, and adjust the ratios of such sounds as were not determinable by the division of a chord in the manner herein before-mentioned. That division was sufficient, and it answered to the greatest degree of mathematic exactness for ascertaining the ratios of the diatessaron, the diapente, and the tone: and, agreeable to what has been already laid down concerning the investigation of the consonances by Pythagoras, it will most evidently appear upon experiment, that if a chord be divided into twelve equal parts, six of those parts will give an octave to that sound which would have been produced by the same chord, if struck before such division; from whence it appears, that the ratio subsisting between the unison and its octave is duple: again, that eight parts of the twelve will give a diatessaron, which bears to the unison six a ratio of 4 to 3; and that nine parts, according to the same division; will produce the diapente, which bears to the unison six a ratio of 3 to 2; and lastly, that the sound produced at the ninth part will be distant from that at the eighth, and so reciprocally; a tone, in the ratio of 9 to 8, called a Sesquioctave, and often the Diezeugtic tone, which furnished the ear at least with a common measure for the greater intervals.

But we are to note, that the system of Pythagoras was not completed, till, by the very artful contrivance

* Lib. II. pag. 44. ex Vers. Meibom.

of two tetrachords, to be used alternately, as the nature of the melody might require, a division of the tone between a and \sharp was effected. By this an interval of a Hemitone was introduced into the system, with which no one section of the chord, supposing it to be divided into twelve parts, would by any means coincide: with great ingenuity therefore did Euclid invent that famous division the Sectio Canonis, by means whereof not only the positions of the several sounds on a supposed chord are precisely ascertained, but a method is suggested for bringing out those larger numbers, which alone can shew the ratios of the smaller intervals, and which therefore make a part of every representation that succeeding writers have given of the immutable system.

The Sectio Canonis of Euclid is a kind of appendix to his Isagoge, or Introductio Harmonica, containing twenty theorems in harmonics. Nevertheless the title of Sectio Canonis was by him given to the following scheme of a supposed chord, divided for the purpose of demonstrating the ratios of the several intervals thereby discriminated, which scheme is inserted at the end of his work.

SECTIO CANONIS OF EUCLID.

	B	
	—	
	—E	
Nete hyperboleon.	M	Paranete hyperboleon.
	N	Trite hyperboleon.
Nete diezeugmenon.	H	
Nete synemmenon.	Z	
	X	Trite diezeugmenon.
Paramese.	K	*Trite synemmenon.
	—	
Mese.	D	
	R	Meson diatonos.
	O	Parhypate meson.
	—	
Hypate meson.	Θ	
	G	Hypaton diatonos.
	P	Parhypate hypaton.
	—	
Hypate gravis.	L	
	—	
Proslambanomenos.	A	

The foregoing canon or scheme of a division is introduced by a series of theorems, preparatory to an explanation of it, which explanation is contained in Theorems XIX and XX; the first of these refers to the immoveable sounds, that is to say, Proslambanomenos, and the other sounds to the left of the line,

and the latter to the moveable, which are Parhypate, and the rest on the right thereof; the sum of which two species composed the great or immutable system.

Theorem XIX directs the adjustment of the canon for the Stabiles or immoveable sounds, and that in the manner following:—

'Let the length of the canon be A B, and let it be divided into four equal parts at G D E, therefore B A, as it will be the gravest sound, will be the sonus bombus. Farther, A B is supertertius of G B, therefore G B will sound a diatessaron to A B, towards the acumen, and A B is Proslambanomenos; wherefore G B will be Hypaton Diatonos. Again, because A B is duple of B D, the former will sound a diapason to the latter, and B D will be Mese. Again, because A B is quadruple of E B, E B will be Nete Hyperboleon; therefore G B is divided twofold in Z, and G B will be duple of Z B, so as G B will sound to Z B the interval of a diapason, wherefore Z B is Nete Synemmenon. Cut off from D B a third part D H, and D B will be sesquialtera to H B, so as for this reason D B will sound to H B the interval of a diapente, therefore H B will be Nete diezeugmenon. Farther, make H Θ equal to H B, therefore Θ B will sound a diapason to H B, so that Θ B will be Hypate meson. Again, take the third part of Θ B, Θ K, and then Θ B will be sesquialtera to K B, so that K B will be Paramese. Lastly, cut off L K equal to K B, and then L B will be Hypate the most grave, and thus all the immoveable sounds will be taken in the canon.'

Theorem XX contains the following directions respecting the Mobiles or moveable sounds:—

'Divide E B into eight parts, of which make E M equal to one, so as M B may be superoctave of E B. And again, divide M B into eight equal parts, and make one of them equal to N M, therefore N B will be a tone more grave than B M, and M B will be a tone graver than B E; so as N B will be Trite hyperboleon, and M B will be Paranete hyperboleon diatonos. Farther, divide N B into three parts, and make N X equal to one of them, so as X B will be supertertius of N B, and the diatessaron will be produced towards the grave, and X B will be Trite diezeugmenon. Again, taking half of X B, make X O equal to it, so as for this reason O B will give a diapente to X B, wherefore O B will be Parhypate meson; then make O P equal to O B,* so as P B will be Parhypate hypaton. Lastly, take the fourth part of G B, G R, and R B will be Meson diatonos.'

CHAP. V.

THE Sectio Canonis of Euclid, in the judgment of the most eminent writers on harmonics, was the first essay towards a determination of the ratios by the supposed division of a chord; and, assuming the proportions of the diapason, diapente, diatessaron,

* In the Canon O P is not equal to O B but to O X, and Meibomius, with all his care, has made a mistake, which the following page, to go no farther, furnishes the means of rectifying; for observe, that in the Canon of Aristides Quintilianus, which has the numbers to it, Trite diezeugmenon, marked X in that of Euclid, is 3888, and Parhypate hypaton marked P in that of Euclid also, is 7776, which is just double the former number, the consequence whereof is evident.

diezeugtic tone, and limma, as laid down by the Pythagoreans, the division will be found to answer to the ratios: yet this does not appear by a bare inspection, but can only be proved by an actual admeasurement of the several intervals contained in the canon. Now as whatever is geometrically divisible, is also divisible by numbers, succeeding writers in assigning the ratios of the intervals have taken the aid of the latter, and have applied the numbers to each of the sounds, as they result from a division of the canon. How they are brought out will hereafter be made appear.

But here it is necessary to add, that the *Seccio Canonis* of Euclid, perfect in its kind as it may seem, is supposed to have received some improvement from Aristides Quintilianus, at least with respect to the manner of dividing it; for this we have the testimony of Meibomius, who speaks of a canon of Aristides, which had been, once extant, but was perished, or at least was wanting in all the copies of his work: and which he his editor had happily restored. The following is a representation of the Canon, with the numbers annexed:—

	-B	
Nete hyperboleon.	- D.	2304.
Hyperbol. diatonos.	- l.	2592.
Trite hyperboleon.	- m.	2916.
Nete diezeugmenon.	- G.	3072.
Nete synemmenon.	- F.	3456.
& diezeugm. diatonos.	- n.	3824.
Trite diez. & syn. diat.	- i.	4096.
Paramesos.	- o.	4374.
Trite synemmenon.	- C.	4608.
Mese.		
Meson diatonos.	- P.	5184.
Parhypate meson.	- q.	5832.
Hypate meson.	- H.	6144.
Hypaton diatonos.	- E.	6912.
Parhypate hypaton.	- r.	7776.
Hypate hypaton.	- K.	8192.
Proslambanomenos.	- A.	9216. *

* The division of Euclid agrees with that of Aristides as to the manner of obtaining the standing, but differs as to some of the moveable chords, for Euclid finds the Trite diezeugmenon, by setting off towards the grave a diatessaron from the Trite hyperboleon; he next finds the Parhypate meson, by setting off towards the grave a diapente from the Trite diezeugmenon, which might be easier found by setting down a diapason from the Trite hyperboleon. He also finds the Parhypate hypaton by making O P

It does not appear whether the numbers were originally part of the canon, or whether they were inserted by Meibomius. However, from several passages in Ptolemy, particularly in Book I. Chap. 10, where he demonstrates the ratio of the limma, we meet with the number 2048, which is the half of 4096, 1944, the half of 3888, and others, which shew the antiquity of this method of numerical division.

The following is an explanation of the canon as given by Meibomius, in his notes on Aristides Quintilianus, page 312, et seq;—

'The standing sounds are first set down in the division of the canon, and after them the moveable ones; we have marked the standing sounds by capital letters, and to these are added the moveable ones. The Hypaton diatonos and the rest are marked by the small letters. They are thus to be taken:—

'I. Proslambanomenos, A B, which is the whole length of the chord or line.

'II. Mese, C B, half thereof.

'III. Nete hyperboleon, D B, the fourth part of the whole chord.

'IV. Hypaton diatonos, E B, three fourths thereof.

'V. Nete synemmenon, F B, the said three fourths, E B, divided into two equal parts.

'VI. Nete diezeugmenon, G B, two thirds of half the chord, that is one third of the whole chord; but this may be perceived by multiplying an half by two thirds, thus, $\frac{1}{2} \times \frac{2}{3} = \frac{1}{3}$.

'VII. Hypate meson, H B, two thirds of the whole chord, or the two thirds, G B, of the half chord twice set off, which chord therefore we take in the opening of the dividers, and set off twice.

'VIII. Paramesos, I B, (one third I H, being taken out of the two thirds H B of the whole chord) is two thirds of two thirds of the whole.

'IX. Pypate hypaton, K B; two thirds I B of the two thirds H B twice set off.

'In order to assume the lesser intervals, the following method must be made use of:—

'I. The 4th part D B of the whole chord being divided into eight equal parts, I set off l below D equal to one of those parts, and l B will be Paranete hyperboleon.

'II. Trite hyperboleon m B is assumed in the same manner, viz., by dividing the line l B into eight equal parts, and taking l m equal to one of them out of l A.

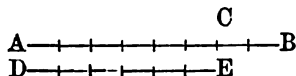
'III. Trite diezeugmenon, and the following moveable sounds, are easily to be assumed in the same manner.'

Besides the foregoing explanation of the canon, Meibomius has given the following, which he calls a

equal to O X, that is by setting off a diapason towards the grave from the Trite diezeugmenon, for he had made O X equal to half X B, and consequently twice O X O P must be equal to X B. And lastly, he finds the Meson diatonos by setting off a diatessaron towards the acute from the Hypaton diatonos, whereas all the four sounds, as well as the other moveable ones, are found in Aristides, by a division into eight parts, that is by setting off sesquioctave tones. It seems, however, upon the whole, that Aristides followed the division of Euclid, but neither of these can answer to the Aristoxenian principles, for this reason, that the *Seccio Canonis* both of Euclid and Aristides refer to those arithmetic and harmonic ratios, which are discernable in the proportions of Pythagoras, whereas Aristoxenus rejected the criterion of ratios, and maintained that the measure of intervals was determinable by the sense of hearing only.

Notable Theorem, and says of it that it is very useful in facilitating the section of the canon.

'The difference between two lines that are to each other in a sesquitertia ratio, being divided into two equally, will give the eighth part of the greater line.



'A B is sesquitertia to D E; C B is the excess of 'A B above D E, C B divided into two equally will 'exhibit the eighth part of A B.

'We shall see the same in the section of our canon. 'Let the line G B be divided into eight equal parts, 'I say the part G D thereof will contain two eighth 'parts; so that this need only be divided into two 'equally, as appears by this following demonstration; 'for as G B is sesquitertia to D B, that is as 4 to 3, 'if G B be divided into twice four parts, that is 'eighths, D B will contain six of those eighths, and 'consequently D G two eighths, and its half will 'contain one eighth. Also if F B is to be divided 'into eight equal parts, its part F I need be divided 'only into two equally, in order to have one eighth 'part, which I set off from F to n, to find the excess 'of the tone above F B. The same method may be 'used in the following ones.

'Moreover, the Meson diatonos, and the other two 'moveable chords may also be obtained by the follow- 'ing method, namely, Meson diatonos, by setting off 'the part l B, twice from B; Parhypate meson, by 'setting off the part m B, twice; Parhypate hypaton, 'by setting off the part n B, twice.

'But whatsoever is here shown in lines may, by 'the ingenuity of the intelligent reader, be easily 'applied in finding out the numbers.'

The canon of Aristides Quintilianus, with the numbers affixed, supposes the whole chord to contain 9216 parts, and being struck open, to produce the most grave sound of the system, viz., A; the interval then of a tone at H , the next sound in succession, as being in the proportion of 8 to 9 to A, will require that the chord be stopped at 8192; and, supposing it to answer, we may with the utmost propriety say, that the ratio of a tone is as 9216 is to 8192, or in other words, that H is produced at 8192 of those parts whereof the chord A contains 9216; and these two numbers will be found to bear the same proportion to each other as those of 9 and 8. Again, for the diapason a, the number is 4608, which is just the half of 9216, as 6 is the half of 12; for the diatessaron D, the number is 6912, which is three fourths of 9216; and for the diapente E, the number is 6144, which is two thirds of 9216. Hence it appears that the numbers thus taken for the tone, or for the consonances of the diatessaron, and the diapente, or their replicates, as often as it may be thought necessary by the reiteration of an octave, or any less system, to extend that of the bisdiapason, answer in like manner to the ratios of 9 to 8, 6 to 12, 12 to 9, and 12 to 8, in the primitive system.

These proportions we are told will be the result of an actual division of a string, which whoever is

desirous of making the experiment, is hereby enabled to try; though, by the way, it is said by Meibomius that for this purpose one of two ells in length will be found necessary. Nevertheless, by the help of the principles already laid down, namely, that the diapason has a ratio of 2 to 1, the diapente of 3 to 2, the diatessaron of 4 to 3, and the tone of 9 to 8, which are to be considered as data that all harmonical writers agree in, it is very easy, by means of arithmetic alone, to bring out the numbers corresponding to the intervals, in the diatonic bisdiapason. Bontempi has given a very particular relation of the process in an account of the method taken by the ancients for that purpose; and immediately after, an exhibition of that system with the proper numbers in the following scale:—

Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.	2304. Nete hyperb.	aa											
				Tone												
				2592. Paranete hyperb.	g											
				Tone												
				2916. Trita hyperb.	f											
				Hemitone												
				3072. Nete diez.	e											
				Tone												
				3456. Paranete diez.	d	3456. Nete synem.	d	Tetrach. Synem.								
				Tone		Tone										
				3888. Trita diez.	c	3888. Paranetesynem.	c									
				Hemitone		Tone										
Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.	4096. Paramese	b	4374. Trita synem.	b	Tetrach. Synem.								
				Tone		Hemitone										
				4608. Mese	a	4608. Mese	a									
				Tone												
				Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.	5184. Lychanos meson	G			Tetrach. Synem.				
								Tone								
								5832. Parhypate meson	F							
								Hemitone								
								Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.	6144. Hypate meson	E			Tetrach. Synem.
												Tone				
												6912. Lychanohypat.	D			
												Tone				
Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.									7776. Parhypate hypat.	C			Tetrach. Synem.
												Hemitone				
												8192. Hypate hypaton	b			
												Tone				
				Tetrach. hypat.	Tetrach. meson.	Tetrach. diez.	Tetrach. hyperb.					9216. Proslambano.	A*			Tetrach. Synem.

His description of the process is in these words: 'The numbers affixed to the several chords in the 'system draw their origin from the sesquioctave pro- 'portion, which is the relation that the second chord 'bears to the first; and, proceeding from the acute 'to the grave, the numbers will be found to be in the 'ratio of subsestave, subsestave, subsestave, 'altera, and subduple. But to be more particular:—

'As the third chord was to be the sesquioctave 'of the second, and as the second had not an eighth 'part, the ancients multiplied by 8, and set down the 'number produced thereby: if the fourth chord was 'to be the sesquitertia, they multiplied the numbers 'by 3; If it was to be sesquialtera the numbers were 'doubled; and if by chance there were any fractions, 'they doubled them again to find even numbers, and 'so they went on: but as all these operations belong 'to arithmetic, and of course must be known, there 'is no necessity to explain them farther.

'However, as all this is different from any practice

* Bontemp. 97.

'in the modern music, in order that those who are not perfectly versed in arithmetic may understand the foundation of this science, it will not be amiss here to explain it. You must then know, that as harmonic music was subordinate to arithmetic, the ancients shewed only the intervals by numbers arising from the measures they had found out by experiments upon the monochord.

'When they wanted therefore to demonstrate in the constitution of the system what chord was either double, or sesquialtera, or sesquitercia, or sesquioctave to another by arithmetical numbers, they used multiplication, or the doubling of the numbers, in order that they might rise by degrees one above the other. They began from the most acute chord, which is the Nete hyperboleon, going on as far as the Trite synemmenon; which operation is demonstrated by the following columns of numbers:—

	1	2	3	4	5	6
aa	8	64	192	576	1152	2304
g	9	72	216	648	1296	2592
f		81	243	729	1458	2916
e			256	768	1536	3072
d			288	864	1728	3456
c			324	972	1944	3888
b				1024	2048	4096
h					2187	4374*

'The method which they used in these multiplications and reduplications was this; as g was to be sesquioctave of aa, and f sesquioctave of g; and as g had not an eighth part, to find it they multiplied aa and g by 8; from which multiplication the numbers of the second order were produced, and they put down 81 sesquioctave of 72. As e was to be sesquitercia of aa, and had not a third part, they multiplied all the second order by 3; from which multiplication was produced the third order, and there came out the number 256, sesquitercia of 192; in like manner d was found to be sesquitercia of g, and c of f.

'As b was to be sesquitercia of e, and had not a third part, they multiplied all the third order by 3, from which was produced the fourth order, and there came out 1024, sesquitercia of 768; as b was to be sesquialtera of f, there came out fractions, to avoid which all the fourth order was doubled, and so the fifth order was produced; and there was the number 2187, sesquialtera of 1458.

'In a word, give me leave to repeat again this operation, with common explications for those who are quite unacquainted with the rules of arithmetic; by multiplying eight times 8 they had 64 for aa; by multiplying nine times 8 they had 72 for g; and adding to 72 the number nine, they had 81 for f.

'The sesquitercia, which is nothing but the proportion 4 to 3, constituting the diatessaron from e to aa, was produced by giving to aa three times 64, which made 192, and to e four times 64, which made 256.

'That of d to g was produced by giving to g three times the number 72, which made 216; and to d four times the same, which made 288.

'That of c to f was produced by giving to g three times 81, which made 243; and to c four times the same, which made 324.

'That of h to e was produced by giving to e three times 256, which made 768; and to h four times the same, which made 1024.

'The sesquialtera, which is nothing but the proportion 3 to 2, constituting the diapente from b to f, was produced by giving to f twice 729, which made 1458; and to b three times the same, which made 2187.

'Finally, in order that this kind of numbers might do for the chords of the chromatic and enharmonic genera; to avoid fractions they doubled all the fifth order, and thereby brought out the sixth; so that the second order is the produce of the first multiplied by 8; the third order is the produce of the second multiplied by 3; the fourth order is the produce of the third multiplied by 3; the fifth order is double the fourth, and the sixth double the fifth; and the numbers of the sixth order are the same as those of the tetrachords Hyperboleon, Diezeugmenon, and Synemmenon, in the foregoing scale.

'There is besides these the Mese, the number of which is 4608, which is the double of 2304, the number of the Nete hyperboleon, because there is between the one and the other chord the interval of a diapason.

'The number 5184 of the Lychanos meson is twice the number 2592 of the Paranete hyperboleon, because there is between them the same interval of the diapason; and so the following numbers towards the grave are double to the numbers belonging to the acute chords, following from the Paranete hyperboleon in succession; because there is between them all, in their respective degrees, the usual interval of the diapason. As the sounds of the diatonic genus have their numbers, so likewise have the sounds of the other genera numbers, which are peculiar to them, except the Nete hyperboleon, the Nete diezeugmenon, the Nete synemmenon, the Paramese, the Mese, the Hypate meson, the Hypate hypaton, and the Proslambanomenos, whose numbers are common to all the genera, as their sounds are fixed. Every thing relating to them may be seen in their respective systems.'

It is to be remembered, that it was for the purpose of explaining the doctrine of the genera that the foregoing enquiry into the proportions of the intervals was entered into; this enquiry respected the diatonic series only, and the proportions thereby ascertained are the diapason, diapente, diatessaron, and tone; besides these, another interval, namely, that whereby the diatessaron exceeds the ditone, and which is generally supposed to be a semitone, for now we shall use the appellation given to it by the Latin writers, has been adjusted, and in general shewn to have a ratio of 256 to 243.

But here it is necessary to mention, that the ratio of this interval was a subject of great controversy with the ancient musicians. What were the sentiments of Pythagoras about it we are nowhere told;

though if it be true that he constituted the diatessaron in the ratio of 4 to 3, and made each of the tones contained in it sesquioctave, it will follow as a consequence, that the interval necessary to complete that system must have been in the ratio of 256 to 243: this is certain, that Boetius, and the rest of the followers of Pythagoras, deny the possibility that it can consist in any other: but this is a method of deduction by numerical calculation, and the appeal is made to our reason, which, in a question of this nature, say some, has nothing to do.

The first who asserted this doctrine, and he has done it in terms the most explicit, was Aristoxenus, the disciple and successor of Aristotle; he taught that as the ear is the ultimate judge of consonance, we are able by the sense of hearing alone to determine the measure both of the consonants and dissonants, and that both are to be measured or estimated, not by ratios but by intervals.* The method he took was this, he considered the diapason as consisting of the two systems of a diatessaron and diapente; it was easy to discover the difference between the two to be a tone, which was soon found, allowing the ear to be the judge, to be divisible into semitones. These two latter intervals being once recognized by the ear, became a common measure, and enabled him to determine the magnitude of any interval whatever, which he did by various additions to, and subductions from, those above mentioned; in like manner as is practised by the singers of our times, who by an instantaneous effort of the voice, are able not only to utter a fourth, a fifth, a greater or lesser third, a tone, a semitone, and the rest, but by habit and practice are rendered capable of separating and combining these intervals at pleasure, without the assistance of any arithmetical process or computation.

It must be confessed that there seems to be a kind of retrogradation in a process which directs the admeasurement of a part by the whole, rather than of the whole by a part, as this evidently does; but notwithstanding this seeming irregularity, the adherents to the former method are very numerous.

The principles on which these two very different methods of judging are founded, became the subject of great contention; and might perhaps give rise to another question, as extensive in its latitude, as important in its consequences, namely, whether the understanding or the imagination be the ultimate judge of harmony and beauty; or, in other words, what are the peculiar offices of reason and sense in subjects common to them both. The consequence of this diversity of opinions, so far as it related to music, was that, from the time of Aristoxenus the musicians of earlier times, according as they adhered to the one or the other of these opinions, were denominated either Pythagoreans or Aristoxeneans, by which appellations the two sects continued for a long time to be as much distinguished as those of the Peripatetics and Stoics were by their respective names.†

But it seems that as well against the one as the other of the positions maintained by the two parties, there lay strong objections; for as to that of Pythagoras, that reason, and not the hearing, is to determine of consonance and dissonance, it was erroneous in this respect, it accommodated harmonical proportions to incongruous intervals; and as to Aristoxenus, he, by rejecting reason, and referring all to sense, rendered the very fundamentals of the harmonical science incapable of demonstration. The several offices of reason and sense, by which we are here to understand the sense of hearing, are very accurately discriminated by Ptolemy, who undertook the task of reviewing this controversy; and the method he took to reconcile these two militant positions will be shewn at large in that extract from his treatise, which we mean hereafter to exhibit in its proper place; the only question at present to be discussed, is that relating to the measure of the diatessaron. That it exceeded two of those tones, one whereof constituted the difference between the diapente and diatessaron, was agreed by both parties; but the measure of this excess was the point in debate: the Pythagoreans asserted it to be an interval in the ratio of 256 to 243, to which, for want of a better, they gave the name of Limma; the Aristoxeneans, on the other hand, contended that it was neither more nor less than a semitone. The question then became, Whether is the system of a diatessaron compounded of two tones and a limma, or of two tones and a semitone?

Ptolemy has entered into a very minute examination of this question; and though he professes to be, as he certainly is, an impartial arbiter between the two sects, and is very free in his censures on each; yet has he most irrefragably demonstrated the Pythagorean tenet to be the true one. The method he has taken to do it may be seen in the first book of his *Harmonics*, chap. x., but the following process will enable any one to judge of the force of his reasoning.

Let the number 1536, which it is said is the smallest that will serve the purpose, be taken, and after that 1728, its sesquioctave, to express a tone; and again, the sesquioctave of 1728, which is 1944, for another tone; the numbers 1536 and 1944 will then stand for the ditone. The diatessaron is sesquitercian, or as 4 to 3, it is therefore necessary to seek a number that shall contain four of those parts, of which 1536 is three, and this can be no other than 2048; so that the interval whereby the diatessaron exceeds the ditone, is in the ratio of 2048 to 1944; or, in smaller numbers, as 256 to 243. But to judge of the magnitude of this interval, let the sesquioctave of 1944, 2187 be taken for a third tone; it will then remain to enquire the difference between the two ratios 2187 to 2048, and 2048 to 1944, and the former will be found the greater; for 2187 exceeds 2048 by more than a fifteenth, and by less than a fourteenth part; whereas 2048 exceeds 1944 by more than a nineteenth, and by less than an eighteenth; and consequently that which, together with the ditone completes the diatessaron, is the lesser part of the third tone.

* Wallis Appendix de Veterum Harmonica, Quarto, pag. 290.

† Porphyrii in Ptolemæi Harmonica Commentarius, Edit. Wallisi, pag. 180.

Salinas calls this demonstration of Ptolemy an excellent one, as most undoubtedly it is, and in his *Treatise de Musica*, lib. II., cap. xx., exhibits it in the following diagram:—

D I A T E S S A R O N .				
GREATER TONE. GREATER TONE. GREATER TONE.				
APOTOME. LIMMA.				
2187	2048	1944	1728	1636

To this lesser part of the third tone 2048 to 1944, or in lesser numbers, 256 to 243, was given the name of the Limma of Pythagoras; though some writers, and those of the Pythagorean sect, scrupled not to term it a Diesis. The greater part of the tone resulting from the above division was termed Apotome, a word signifying the residue of what remains of a line after part has been cut off.

Salinas, lib. II. cap. xx., remarks, that both the theoretic and practical musicians among the moderns are deceived in thinking that the Apotome of the ancients is that interval, which, in such musical instruments as the organ, and others of the like kind, is found between H and b ; or, in other words, that the interval between H and b is greater than that between H and c , and than that between b and a ; when, says he, the thing is quite the reverse, and may be proved by the ear.

Farther, lib. II. cap. x., he observes of the Limma, that as Pythagoras had divided the diapason into two diatessarons and a sesquioctave tone, he discovered that the diatessaron was capable of a like method of division, namely, into two continued tones, and that interval which remained after a subtraction of the ditone from the diatessaron. And this which he calls a semitone, is that which Ptolemy calls the semitone accepted and best known; and of which Plato in *Timæus* makes mention; when having followed the same proportion, he says that all the duple ratios were to be filled up with a sesquitertias and a sesquioctave, and all the sesquitertias with sesquioctaves, and the interval 256 to 243. He adds, that Cicero mentions this semitone in his book de *Universitate*, as does Boetius in all his divisions; and that there were none of the ancients to whom it was not known, for that all the Philosophers embraced the Pythagorean traditions of music. The same author adds, that the Pythagorean Limma was esteemed by the Greeks, particularly Bacchius and Bryennius, to be irrational; and that Plato himself dared not to call it a proportion, for the reason, as he conceives, that it was not superparticular.

Hitherto we have spoken of the tone in general terms, and as an interval in a sesquioctave ratio, such as constitutes the difference between the diatessaron and diapente, and it is said that the Pythagoreans acknowledged no other;* it is nevertheless necessary to mention that there is a lesser interval, to which the appellation of tone is also given; the ratio whereof is that of 10 to 9. It is not sufficiently clear who it was that first discovered it, but, from

several passages in the harmonics of Ptolemy,† it should seem that Didymus, an ancient musician, whom he frequently takes occasion to mention, was the first that adjusted its ratio.

Dr. Wallis, who seems to have founded his opinion on that of Salinas, and certainly entertained the clearest conceptions of the subject, has demonstrated very plainly how both the greater and lesser tone are produced; for assuming the diapente to be in the ratio of 3 to 2, or which is the same, the numbers being doubled, 6 to 4; by the interposition of the arithmetical mean 5, he shows it to contain two intervals, the one in the ratio of 6 to 5, the other in that of 5 to 4.‡

D I A P E N T E .		
Semititone	Ditone	
6	5	4
Sesquialtera.		

The latter of these, which constituted the ditone or greater third, subtracted from the diapente, left that interval in the ratio of 6 to 5, which by the Greeks was called a Trihemitone, and by the Latins a deficient, or *semi* ditone, but by the moderns a lesser or flat third.

The consideration of the semitone will be hereafter resumed; but as to the ditone it had a superparticular ratio, and consequently would not, any more than the diapente, admit of an equal division.§ In order therefore to come at one that should be the nearest to equality, Dr. Wallis doubled the terms 5, 4, and thereby produced the numbers 10, 8, which have the same ratio. Nothing then was wanting but the interposition of the arithmetical mean 9,

D I T O N E.		
Greater Tone.	Lesser Tone.	
8	9	10
Sesquioctave	Sesquinonal	
Sesquiquarta.		

and a division was effected which produced the greater or sesquioctave tone, 9 to 8, and the lesser or sesquinonal tone, 10 to 9.||

CHAP. VI.

HAVING thus adjusted the proportions of the greater and lesser tone, it follows next in order to consider the several divisions of each, the first and most obvious whereof is that of the semitone; but here two things are to be remarked, the one that the adjunct *semi*, though it may seem to express, as it does in most instances, the half of any given quantity, yet in musical

† Lib. II., cap. 13, 14. Salinas, lib. II., cap. 17.

‡ Wallis, Append. de Vet. Harm. quarto, pag. 322.

§ That a superparticular is incapable of an equal division is clearly demonstrated by Boetius, lib. III., cap. 1, and must be considered as a first principle in harmonics. Vide Macrobius in *Somnium Scipionis*, lib. II., cap. 1.

|| Wallis Append. de Vet. Harm. quarto, pag. 323. Salinas de Musica, lib. II., cap. 17.

* Salinas de Musica, lib. II., cap. 17. Boet. lib. IV., cap. 5.

language has a signification the same with deficient or incomplete : the other is that although as the lesser is always contained in the greater, and consequently the tone comprehends the semitone and more, yet the semitone is not, nor can be found in, or at least cannot be extracted from, or produced by any possible division of the tone. The Aristoxeneans, who asserted that the diatessaron consisted of two tones and a half, had no other way of defining the half tone, than by taking the ditone out of the diatessaron, and the residue they pronounced to be a hemitone, as it nearly is ; and the Pythagoreans, who professed the admeasurement and determination of intervals by ratios, and not by the ear, were necessitated to proceed in the same way ; for after Pythagoras had adjusted the diezentic tone, and found its ratio to be sesquioctave, or as 9 to 8, it nowhere appears that he or any of his followers proceeded to a division of that interval into semitones, and indeed it is not in the nature of the thing possible to effect any such division of it by equal parts. Ptolemy, who, so far as regards the method of defining the intervals by their ratios, must be said to have been a Pythagorean, has had recourse to this method of subtracting a lesser interval from a greater for adjusting the proportion of the Limma ; for after having assumed that the ratio of the diatessaron was sesquitertia, answering to the numbers 8 and 6, or which is the same, 4 to 3, he measures out three sesquioctave tones, 1536, 1728, 1944, 2187, and subtracts from them the diatessaron 2048 to 1536, and thereby leaves a ratio of 2187 to 2048, which is that of the apotome ; the limma 2048 to 1944, then remains an adjunct to the two sesquioctave tones 1728 to 1536, and 1944 to 1728 ; and the ratio of 2048 to 1536 is 8 to 6, or 4 to 3 ; and would we know the ratio of 2048 to 1944, it will be found to be 256 to 243, for eight times 256 is 2048, and eight times 243 is 1944.*

And Didymus, who after he had discovered the necessity of a distinction of tones into the greater and lesser, and found that it required an interval different in magnitude from the limma, to complete the diatessaron, had no way to ascertain the ratio of that interval, but by first adjusting that of the ditone ; in the doing whereof he also determined that of the semitone, for so are we necessitated to call the interval by which the diatessaron is found to exceed the ditone. With respect to this interval, which in the judgment of Salinas, is of such importance, that he seems to think it the hinge on which the knowledge of all instrumental harmony turns ; it seems clearly to have taken place of the limma, immediately after the discrimination of the greater and lesser tone : and there is reason to think it was investigated by Didymus in the following manner. First he considered the ratio of the diatessaron to be, as has been shewn, sesquitertian, or as 8 to 6 ; or, which is the same, those numbers being doubled, 16 to 12. The ditone he had demonstrated to be in sesquiquarta proportion, as 5 to 4. It remained then to find out a number that should contain 5 of these parts, of

which 12 contained four, and this could be no other than 15, and these being set down, demonstrated the ratio of the semitone to be 16 to 15.

D I A T E S S A R O N .			
Ditone		Greater Semitone	
12		15	16
Sesquiquarta		Sesquidecimaquinta	
Sesquitertia.			
+			

† This interval is also the difference between the semiditone 6 to 5, and the sesquioctave tone 9 to 8, which, multiplying the extreme numbers by 3, is thus demonstrated :—

S E M I D I T O N E .		
Greater Semitone	Tone	
15	16	18
Sesquidecimaquinta	Sesquioctave	
Sesquiquinta.		

‡ But it seems that this interval, so very accurately adjusted, did not answer all the combinations of which the greater and lesser tones were capable ; nor was it adapted to any division of the system, other than that which distinguishes the diatonic genus. These considerations gave rise to the invention of the lesser semitone, an interval so peculiarly appropriated to the chromatic genus, that Salinus and Mersennus scruple not to call it the Chromatic Diesis ; the measure of it is the difference between the ditone and semiditone, the former whereof is demonstrated to be in sesquiquarta proportion, or as 5 to 4 ; or, which is the same, each of those numbers being multiplied by 5, 25 to 20. The semiditone is sesquiquinta, that is to say, as 6 to 5 ; or multiplying each of those numbers by four, as 24 to 20 ; from a comparison therefore of the semiditone with the ditone, it will appear that the difference between them is an interval of 25 to 24, the ratio sought, and which is the measure of the lesser semitone.

D I T O N E .			
Semiditone		Lesser Semitone	
20		24	25
Sesquiquinta		Sesquivigesimaquarta	
Sesquiquarta			

§ Salinas remarks that this lesser semitone of 25 to 24, and the greater one of 16 to 15, compose the sesquisonal or lesser, and not the sesquioctave or greater tone, between which and the former he demonstrates the difference to be a comma, or an interval in the ratio of 81 to 80.

Salinas, Mersennus, and other writers, chiefly moderns, speak of a mean semitone in the ratio of

† This and most of the diagrams for demonstrating the other intervals are taken from Salinas, who, it is to be remarked, differs from many other writers in the order of the numbers of ratios, placing the smallest first.

‡ Salinas, lib. II. cap. xviii.

§ Salinas, de Musica, lib. II. cap. 20

* See the preceding demonstration of the ratio of the Pythagorean limma.

135 to 128, which with that greater one of 16 to 15, completes the sesquioctave tone; and of another in the ratio of 27 to 25, which added to the lesser semitone 25 to 24, also makes up the greater or sesquioctave tone.* Salinas ascribes the invention of this latter to Ludovicus Follianus, a very ingenious musician of the sixteenth century, of whom an account will be hereafter given; but he says it is unfit for harmony: and indeed it does not appear to have ever been admitted into practice. Salinas de Musica, lib. III., cap. 7.

We are now to speak of the Diesis, as being an interval less in quantity than a semitone: though it is to be remembered that the word as it imports indefinitely a Particle, † is of very loose signification, and is used to express a great variety of dissimilar intervals. Aristotle calls dieses the Elements of song, as letters are of speech; but in this the moderns differ from him. Others of the Greek writers, and Vitruvius, a Latin, after them, make the diesis to be a quarter of a tone, and Salinas less. The Pythagoreans use the word Diesis and Limma indiscriminately to express the interval 256 to 243. In the subsequent division of the tone into lesser parts, the name of diesis has been given sometimes to one, and at others to other parts arising from that division; and hence those different definitions which we meet with of this interval; but the general opinion touching it is that it is less than a semitone, and more than a comma. We will consider it in all its variety of significations.

Boetius, in the third book of his treatise de Musica, has related at large the method taken by Philolaus the Pythagorean for dividing the tone into nine parts, called commas, of which we shall speak more particularly hereafter; according to this division, two commas make a diaschisma, and two diaschismata a diesis. This is one of the senses in which the term diesis is used, but it is not easy to discover the use of this interval, for it does not seem to be adapted either to the tetrachord composed of sesquioctave tones, or that later one of Didymus, which supposes a distinction of a greater and lesser tone; so that in this instance the term seems to be restrained to its primitive signification, and to import nothing more than a particle; and Salinas seems to concur in this sense of the word when he says that in each of the genera of melodies the least interval is called a diesis.

In other instances we are to understand by it such an interval as, together with others, will complete the system of a diatessaron. There are required to form a diatessaron, or tetrachord in each of the genera, tones, semitones, and dieses. In the diatonic genus the diesis is clearly that, be it either a semitone, a limma, or any other interval, which, together with two tones is necessary to complete the tetrachord. If with the Pythagoreans we suppose the two tones to be sesquioctave, it will follow that the diesis and the limma 256 to 243 are one and the same interval; on the other hand, if with Didymus we assign to the

two tones, the different ratios of 10 to 9, and 9 to 8, the interval necessary to complete the diatessaron will be 16 to 15; or the difference between the ditone in the ratio of 5 to 4, and the diatessaron above demonstrated. In short, this suppletory interval, whatever it be, is the only one in the diatonic genus, to which the appellation of diesis is ever given.

To the chromatic genus belong two intervals of different magnitudes, and the term diesis is common to both; the first of these is that of 25 to 24, mentioned above, and shewn to be the difference between the ditone and semiditone, and is what Salinas has appropriated to the chromatic genus. Gaudentius mentions also another species of diesis that occurs in this genus, in quantity the third part of a tone, ‡ in which he has followed Aristoxenus; but as all the divisions of the Aristoxeneans were regulated by the ear, and supposed a division of the tone into equal parts, which parts being equal, must necessarily be irrational, it would be in vain to seek a numerical ratio for the third part of a tone.

We are now to speak of that other diesis incident to the enarmonic genus, to which the term, in the opinion of most writers, seems to be appropriated; § for whereas the other diesis obtained that name, only as being the smallest interval required in each genus, this other is the smallest that any kind of musical progression will possibly admit of. Aristides Quintilianus says, a diesis is as it were a dissolution of the voice.||

According to Boetius, who must everywhere be understood to speak the sense of the Pythagoreans, the two dieses contained in the tetrachord of the enarmonic genus must have been unequal, for he makes them to arise from an arithmetical division of the limma, 256 to 243. ¶

Ptolemy has exhibited,** as he has done in each of the other genera, a table of the enarmonic genus, according to five different musicians, all of whom, excepting Aristoxenus, make the dieses to be unequal, those of Ptolemy are 24 to 23, and 46 to 45.

Salinas uses but one enarmonic diesis, which he makes to be the difference between the greater semitone 16 to 15, and the lesser 25 to 24.

GREATER SEMITONE.		
Lesser Semitone		Diesis
120	125	128
Sesquigesimaquarta	Supertripartiens 125	
Sesquidecima quinta.		
++		

Which numbers are thus produced, 16 and 16 each multiplied by 8 will give 120, and 128, for the greater semitone; we are then to seek for a number that bears the same ratio to 120, as 25 does to 24, which can be no other than 125, so that the ratio of the diesis will stand 125 to 128.

Brossard has applied the term diesis to those signs

† Ex Vers. Melbom. pag. 5.

‡ Boetius lib. II. cap. 23. has given dieses only to the enarmonic.

§ Ex Vers. Melbom. pag. 13.

¶ Boetius, lib. IV. cap. 5.

** Lib. II. cap. 14.

†† Salinas, lib II. cap. 21.

* Salinas, lib. II. cap. 20, lib. III. cap. 7. Mersen. Harmonic. lib. V. De Dissonantibus, pag. 7.

† Macrobi. in Somn. Scipion. lib. II. cap. 1

or characters used by the moderns to denote the several degrees by which a sound may be elevated or depressed above or beneath its natural situation; for the doing whereof he seems to have had no better authority than that of the practitioners of his time, who perhaps are the only persons entitled to an excuse for having given to the sign the name of the thing signified. He professes to follow Kircher, when he says that there are three sorts of dieses, namely, the lesser enarmonic or simple diesis, containing two commas or about a quarter of a tone; the chromatic or double diesis, containing a lesser semitone, or nearly four commas, and the greater enarmonic diesis, containing nearly three fourths of a tone, or from six to seven commas; but this definition is by much too loose to satisfy a speculative musician.

These are all the intervals that are requisite in the constitution of a tetrachord in any of the three genera: it may not be improper however to mention a division of the tone, invented perhaps rather as an essay towards a temperature, than as necessary to the perfection of the genera; namely, that ascribed by Boetius, and others to Philolaus, by which the tone was made to consist of nine parts or commas.

The account of this matter given by Boetius is long, and rather perplexed; but Glareanus,* who has been at the pains of extracting from it the history of this division, speaks of it thus: 'A tone in a sesquioctave ratio is divided into a greater and lesser semitone; the greater was by the Greeks called an apotome, the lesser a limma or diesis, and the difference between these two was a comma. The diesis was again divided into diaschismata, of which it contained two; and the comma into schismata, two whereof made the comma.' The passage, to give it at length, is thus:—

'It is demonstrated by musicians, for good reasons, that a tone cannot be divided into two equal parts, because no superparticular ratio, such as is that of a tone, is capable of such a division as Divus Severinus Boetius fully shews in his third book, chap. i., a tone which is in a sesquioctave ratio is divided into a greater and lesser semitone. The Greeks call the greater semitone an apotome, and the lesser a diesis or limma; but the lesser semitone is divided into two diaschismata. The excess whereby a greater semitone is more than a lesser one is called a comma, and this comma is divided into two parts, which are called schismata by Philolaus. This Philolaus, according to Boetius, gives us the definitions of all those parts. A diesis, he says, is that space by which a sesquialteral ratio or diatessaron exceeds two tones; and a comma is that space whereby a sesquioctave ratio is greater than two dieses, that is than two lesser semitones. A schisma is that half of a comma, and a diaschisma is the half of a diesis, that is of a lesser semitone; from which definitions and the following scheme you may easily find out into how many diaschismata, and the other smaller spaces, a tone may be divided, for the same Boetius shews that it can be done many ways in his

'treatise, lib. III. cap. viii., from whence we have taken these descriptions. It is to be observed that the name of diesis is proper in this place; but when, as the ancients have done, we give it to the enarmonic diaschisma, it is improper:—

SESQUIOCTAVE TONE	APOTOME	DIESIS	Diaschisma	mi	h	4096
			Diaschisma	c		4213
		COMMA	(Schisma	d		4330
			(Schisma fa	e		4352
	APOTOME	DIESIS	Diaschisma	f		4374
			Diaschisma	g		91
		COMMA	(Schisma	re	a	4608
			(Schisma			

'Let a h be a tone, h d , or f a, a lesser semitone, or as the Greeks call it, as Boetius witnesseth lib. II, cap. xxvii., a limma or diesis, h f , or d a, a greater semitone, called by the Greeks an apotome, h c and c d , also f g and g a, diaschismata, or the halves of a diesis, d f a comma, whose halves d e and e f are schismata; but it is necessary for our purpose to observe this, let a be Mese, or a la mi re , f Trite synemmenon or fa in b fa h mi h Paramese or mi in b fa h mi , therefore the note re in a la mi re is distant from fa in b fa h mi by a lesser hemitone, and from mi in the same key by a tone; from whence it follows, that the two notes in b fa h mi , which seem to be of the same key, are farther distant from each other than from the extremes or neighbouring keys above and below, viz., mi from c sol fa ut , and fa from a la mi re , for mi and fa are separated from each other by a greater semitone, and from the extremes on either side by only a lesser semitone, for which reason this theory is not to be despised. We must not omit what the same Severinus tells us in lib. III, cap. xiv. and xv., to wit, that a lesser semitone is not altogether four commas, but somewhat more than three; and that a greater semitone is not five commas, but somewhat more than four; from whence it comes to pass that a tone exceeds eight commas, but does not quite make up nine.'

This of Philolaus is generally deemed the true division of the tone, and may serve to prove the truth of that position, which all the theoretic writers on music seem to agree in, namely, that the sesquioctave tone, as being in a superparticular ratio, is incapable of an equal division. But unfortunately the numbers made use of by Glareanus do not answer to the division, for those for the diesis or limma h d 4330, 4096 have no such ratio as 256 to 243, which is what the limma requires, and that other f a, has. and it seems that in his assertion that h and b are farther distant from each other than from c and a ,

* Dodecachordon, lib. I. cap. x.

respectively, he is mistaken. This is noticed by Salinas, who insists that the converse of the proposition is the truth. *De Musica*, lib. II. cap. xx.*

As to the comma, it appears by the foregoing calculation to be in the ratio of 4374 to 4330. Nevertheless, Salinas, for the purpose of accommodating it to practice, has assumed for the comma an interval in the ratio of 81 to 80, which is different from that of Glareanus and Boetius, but is clearly shewn by Salinas to be the difference between the greater and lesser tone. Ptolemy looked upon this latter comma as an insensible interval, and thought that therefore it was a thing indifferent whether the sesquioctave or sesquinal tone held the acutest situation in the diatonic tetrachord; but Salinas asserts, that though it is the least, it is yet one of the sensible intervals, and that by means of an instrument which he himself caused to be made at Rome, he was enabled to distinguish, and by his ear to judge, of the difference between the one and the other of the tones.

Mersennus says that the Pythagoreans had another comma, which was in the ratio of 531441 to 524288, and was between sesqui $\frac{1}{2}$ and sesqui $\frac{1}{4}$; and that Christopher Mondore, in a book inscribed by him to Margaret, the sister of Henry III. of France, speaks of another between sesqui $\frac{1}{8}$, and sesqui $\frac{1}{16}$.† As to the first, though he does not mention it, it is clear that he took the ratio of it from Salinas, who in the nineteenth and thirty-first chapters of his fourth book speaks very particularly of the Pythagorean comma, and says that it is the difference whereby the apotome exceeds the limma.

We have now investigated in a regular progression the ratios of the several intervals of the greater and lesser tone, the greater and lesser semitone, the apotome and limma, the diesis, and the comma; and thereby resolved the tetrachord into its elements. It may be worth while to observe the singular beauties that arise in the course of this deduction, and how wonderfully the lesser intervals spring out of the greater; for the difference between

The	{ Diapente and Diatessaron }	is	- -	a sesquioctave tone.
The	{ Ditone and Greater tone }	is	- -	a sesquinal tone.
The	{ Semiditone and greater tone, and also between the diatessaron and ditone, }	is	- -	a greater semitone.
The	{ Lesser tone and greater semitone, and also between the ditone and semiditone, }	is	- -	a lesser semitone.
The	{ Greater tone and Lesser tone }	is	- -	a comma.
The	{ Greater semitone and Lesser semitone }	is	- -	an enarmonic diesis.

Salinas remarks much to the same purpose on the regular order of the simple consonances in these words. 'It seems worthy of the greatest observation, that the differences of the simple consonances, each above that which is the next under it, are found to be in the proportions which the first square numbers hereunderwritten bear to those that are the

'next less to them: to instance in the diapason, the excess above the diapente is the diatessaron, which is found in the ratio between the first square number 4, and its next less number 3. The excess of the diapente above the diatessaron is the greater tone, which is found in the ratio between the numbers 9 and 8. Again, that of the diatessaron above the ditone is the greater semitone, found in the ratio 16 to 15; farther, the excess of the ditone above the semiditone is the lesser semiditone 25 to 24. All these will appear more clearly in the following disposition of the numbers:—

A					
B		C	A	B	C
2	3	4	Diapason	Diapente	Diatessaron
6	8	9	Diapente	Diatessaron	Tone Major
12	15	16	Diatessaron	Ditone	Semitone majus
20	24	25	Ditone	Semiditone	Semitone minus

'In the above disposition, the last numbers are square, the first longilateral, and the middle ones less than those that are square by unity, but greater than the longilateral ones by as many units as there are numbers of squares above them. The greatest ratios are those between the longilaterals and the squares, the lesser between the longilaterals and the middle numbers, and the least or differences those between the squares and the middle ones. Of the ratios the greatest are marked A, the lesser B, and the least C.‡

Observations of this kind are perpetually occurring in the course of harmonical calculations; and it cannot but be a matter of astonishment to an intelligent mind to find, that those combinations of musical sounds which afford delight to the sense of hearing, have such a relation among themselves, and are disposed with such order and regularity, that they approve themselves also to the understanding, and exhibit to the mind a new species of beauty, such as is observable in theorems, and will for ever result from design, regularity, truth, and order. It is said that the senses are arbitrary, and that too in so great a degree, as to give occasion to a well-known axiom that precludes all dispute about them; but that of hearing seems to be an exception; for what the ear recognises to be grateful, the understanding approves as true. To enquire farther into the reasons why the sense is delighted with harmony and consonance, would be vain, since all beyond what we are able to discover by numerical calculation is resolvable into the will of Him who has ordered all things in number, weight, and measure.

The genera, as has been mentioned, were three; the diatonic, the chromatic, and the enharmonic. We are farther to understand a subdivision of these into species. Gaudentius expressly says, 'The species or colours of the genera are many,'§ and an author of much greater authority, Aristoxenus, has particularly enumerated them. According to him the diatonic genus had two species, the soft and the

* See his sentiment of it pag. 25 of the present work.

† Harmonicor. lib. V. Dissonantis, pag. 88.

‡ De Musica, lib. II. cap. xx.

§ Ex Vers. Meibom. pag. 5.

intense ; the chromatic three, the soft, the hemiolian,* and the tonic; † as to the enharmonic, it had no subdivision. Indeed, the representations of the genera and their species, as well by diagrams as in words, are almost as numerous as the writers on music. Monsieur Brossard has exhibited a view of the Aristoxenean division, taken as he says, from

Vitruvius; and the same is to be met with in an English dictionary of music, published in the year 1740, by James Grassineau.‡

But this representation is not near so particular and accurate, as the Aristoxenean Synopsis of the Genera given by Dr. Wallis in the Appendix to his edition of Ptolemy, and here inserted :—

	Enarmonic	Chromatic Genus			Diatonic Genus		
	Genus	Soft	Hemiolian	Tonic	Soft	Intense	
30	Nete	Nete	Nete	Nete	Nete	Nete	30
24						12	24
18				18	15		
15	24	22	21			Paranete Lichanos	18
12				Paranete Lichanos	Paranete Lichanos		15
9			Paranete Lichanos	6	9	12	12
6	Paranete Lichanos 3	Paranete Lichanos 4	4½ Trite Parhygate	Trite Parhygate 6	Trite Parhygate 6	Trite Parhygate 6	9
3	Trite Parhygate 3	Trite Parhygate 4	4½				6
							3

In order to understand this scheme, we must suppose the tetrachord hypaton, though any other would have served the purpose as well, divided into thirty equal parts : in the primitive division of this system, according to the diatonic genus, the stations of the two intermediate sounds parhygate and lichanos, for it is to be noted that those at the extremities termed stabiles, or immovables, were at 6 and 18 ; that is to say, the first interval in the tetrachord was 6 parts, and each of the other two 12, making together 30 ; so that the second interval was the double of the first, and the third equal to the second, answering precisely to the hemitone, tone, and tone ; this is spoken of the intense diatonic, for it is that species which the ancients are supposed to have meant whenever they spoke of the diatonic generally.

The soft diatonic has for its first interval 6, for its second 9, or a hemitone and a quadrantal diesis, or three fourths of a tone, and for its third 15, viz., a tone and a quadrantal diesis.

We are now to speak of the chromatic genus, the first species whereof, the tonic, had for its first inter-

val 6, or a hemitone ; for its second also 6, and for its third 18, a trihemitone, or tone and a half.

In the hemiolian chromatic, called also the sesquialteral,§ the first and also the second interval was 4½, which is a hemiolian or sesquialteral diesis ; and the third 21, or a tone, a hemitone, and a quadrantal diesis.

† At the time when the above book was published the world were surprised ; no such person as James Grassineau being known to it as possessed of any great share of musical erudition, and the work offered to the public appeared to be the result of great study and skill in the science. But the wonder ceased when it came to be known that the basis of Grassineau's book was the Dictionnaire de Musique of Monsieur Sebastian Brossard, of Strasburg ; though, to do him justice, Grassineau in his preface ingenuously confesses he had made a liberal use of it. For the rest of it he stood indebted to Dr. Pepusch, and perhaps, in a small degree to the other masters, Dr. Greene and Mr. Galliard, who have joined in the recommendation of it.

Grassineau was an ingenious young man ; he understood the Latin and French languages, the latter very well, and knew a little of music ; he had been clerk to Mr. Godfrey, the chemist in Southampton Street, Covent Garden, but being out of employ, he became the amanuensis of Dr. Pepusch, and translated for him into English some of the Greek harmonicians from the Latin version of Meibomius. The Doctor having no farther occasion for him, recommended it to him to translate Brossard's dictionary above-mentioned, which he undertook and completed, the Doctor furnishing him with many new articles, and with additional matter for the enlargement of those contained in Brossard ; and Grassineau's dictionary would have been an inestimable present to the musical world, had due care been taken in the correction of it, but it abounds with errors, and the author is not now living to correct them in a new edition.

Although the dictionary of Brossard, and this of Grassineau, contain a great variety of useful knowledge, it is to be wished that it had been communicated to the world in some better form than that of a dictionary ; for to speak of the latter, some of the articles contained in it are complete treatises.

§ Vide previous note in this page.

* This is but another name for sesquialtera, as Andreas Ornithoparcus asserts in his Micrologus, lib. II. on the authority of Aulus Gellius. It signifies a whole and its half, consequently the sesquialtera ratio in its simplest numbers is 3 to 2.

† Vide Wall. Append. de veter. Harm. quarto. pag. 299.

The soft chromatic makes the first and also the second interval a triental diesis, or third part of a tone, by assigning to *parhypatê* and *lichariôs*, the stations of 4 and 18; and gives to the third twenty-two twelfths of a tone, or, which is the same, twenty-two thirtieths of the whole tetrachord, which amount to a tone, a hemitone, and a triental diesis.

In the enharmonic genus, which, in the opinion of most authors, had no division into species, the first and second intervals, being terminated by 3 and 6, were each quadrantal dieses, or three twelfths of a tone, and the last a ditone. Of the diesis in this genus it is said by *Aristoxenus* and others, that it is the smallest interval that the human voice is capable of expressing; and it is farther to be remarked, that it is ever termed the *enarmonic diesis*, as being appropriated to the *enarmonic genus*.

Euclid's account of the genera is not much different from this of *Aristoxenus*. The diatonic, he says, proceeds from the acute to the grave by a tone, a tone, and a hemitone; and, on the contrary, from the grave to the acute by a hemitone, a tone, and a tone. The chromatic from the acute to the grave by a trihemitone, a hemitone, and a hemitone: and contrarywise, from the grave to the acute by a hemitone, a hemitone, and a trihemitone. The enharmonic progression, he says, is a descent to the grave by a ditone, a diesis, and a diesis; and an ascent to the acumen by a diesis, a diesis, and a ditone. He speaks of a commixture of the genera, as namely, the diatonic with the chromatic, the diatonic with the *enarmonic*, and the chromatic with the *enarmonic*.

He exhibits the *bisdiapason* according to each of the genera, enumerating the several sounds as they occur, from *Proslambanomenos* to *Nete hyperboleon*, and observes that some of them are termed *Stantes* or standing sounds, and others *Mobiles* or moveable; the meaning of which is no more than that the extreme sounds of each tetrachord are immoveable, and that the difference between the genera consists in those several mutations of the intervals, which are made by assigning different positions to the two intermediate sounds.

Colour he defines to be a particular division of a genus; and, agreeable to what is said by *Aristoxenus*, he says that of the *enarmonic* there is one only; of the chromatic three; and of the diatonic two. He says farther, that the *enharmonic* progression is by a diesis, a diesis, and an incomposite ditone; that the chromatic colours or species are the soft, proceeding by two dieses, each being the third part of a tone, and an incomposite interval equal to a tone, and its third part; and the *sesquialteral*, proceeding by a diesis in a *sesquialteral* ratio to that in the *enarmonic*, another such diesis, and an incomposite interval consisting of seven dieses, each equal to a fourth part of a tone; and the tonic by a hemitone, a hemitone, and a trihemitone. Of the diatonic he says there are two species, namely, the soft and the intense, by some called also the *syntonous*; the former proceeding by a hemitone, an interval of three quadrantal dieses, and by another of five such dieses; and the latter by a common division, with its genus, namely, a tone, a tone, and a hemitone.

And here it is to be observed, that these several definitions of the genera are taken from some one or other of their respective species; thus, that of the tonic chromatic is the same by which the genus itself is defined; and the definition of the *syntonous* or intense diatonic is what is used to denote the genus itself. From hence it should seem that of the species some were deemed spurious, or at least that some kind of pre-eminence among them, unknown to us, occasioned this distinction; which amounts to no less than saying that the soft chromatic is more truly the chromatic than either of the other two species of that genus; and that the intense or *syntonous* diatonic is more truly the diatonic than the soft diatonic: as to the *enarmonic*, it cannot in strictness be said to have had any colour or species, for it admits of no specific division.

To demonstrate the intervals in each species by numbers, *Euclid* supposes a division of the tone into twelve parts. To the hemitone he gives six, to the quadrantal diesis three, and to the triental diesis four; and to the whole diatessaron he assigns thirty. In the application of these parts to the several species, he says first, that the intervals in the soft chromatic are four, four, and twenty-two; in the *sesquialteral* four and a half, four and a half, and twenty-one; and in the tonic six, six, and eighteen; in the soft diatonic six, nine, and fifteen; and in the *syntonous* six, twelve, and twelve.

CHAP. VII.

ARISTIDES *Quintilianus*, who, in the judgment of *Dr. Wallis*,* seems in this respect to have been an *Aristoxenean*, speaks of the genera and their species in the following manner:—'Genus is a certain division of the tetrachord. There are three genera of modulation, namely, the harmonic, chromatic, and diatonic; the difference between them consists in the distances of their respective intervals. The harmonic is that genus which abounds in the least intervals, and takes its name from adjoining together. The diatonic is so called because it proceeds by, or abounds in, tones. The chromatic is so termed, because, as that which is between white and black is called Colour, so also that which holds the middle place between the two former genera as this does, is named Chroma. The *enarmonic* is sung by a diesis, diesis, and an incomposite ditone towards the acute; and contrarywise towards the grave. The chromatic towards the acute by a hemitone, a hemitone, and trihemitone; and contrarywise towards the grave. The diatonic by a hemitone, a tone, and tone towards the acute: and contrarywise towards the grave. The diatonic is the most natural of all, because it may be sung by every one, even by such as are unlearned. The most artificial is the chromatic, for only learned men can modulate it; but the most accurate is the *enharmonic*: it is approved of by only the most skilful musicians; for those who are otherwise look on the diesis as an interval which can by no means be sung, and to

* *Append. de veter. Harm. pag. 318.*

'these, by reason of the debility of their faculties, the use of this genus is impossible. Each of the genera may be modulated both by consecutive sounds and by leaps. Moreover, modulation is either direct or straightforward, reverting or turning back, or circumcurrent, running up and down: the direct is that which stretches towards the acute from the grave; the reverting that which is contrary to the former; and the circumcurrent is that which is changeable, as when we elevate by conjunction, and remit by disjunction. Again, some of the genera are divided into species, others not. The enarmonic, because it consists of the smallest dieses, is indivisible. The chromatic may be divided into as many rational intervals as are found between the hemitone and enarmonic diesis; the third, namely the diatonic, into as many rational intervals as are found between the hemitone and tone; there are therefore three species of the chromatic, and two of the diatonic. And, to sum up the whole, these added to the enarmonic make six species of modulation; the first is distinguished by quadrantal dieses, and is called the enarmonic; the second by triental dieses, and is called the soft chromatic; the third by dieses that are sesquialteral to those in the enarmonic, and is therefore called the sesquialteral chromatic. The fourth has a peculiar constitution of two hemitones, it is called the tonic chromatic: the fifth consists of an hemitone and three dieses, and the five remaining ones, and is called the soft diatonic; the sixth has an hemitone, tone, and tone, and is called the intense diatonic. But that what we have said may be made clear, we shall make the division in the numbers. Let the tetrachord be supposed to consist of sixty units, the division of the enarmonic is 6, 6, 48, by a quadrantal diesis, a quadrantal diesis, and a ditone. The division of the soft chromatic 8, 8, 44, by a triental diesis, a triental diesis, and a trihemitone and triental diesis. The division of the sesquialteral chromatic is 9, 9, 42, by a sesquialteral diesis, a sesquialteral diesis, and a trihemitone and quadrantal diesis. The division of the tonic chromatic is 12, 12, 36, by an hemitone, an hemitone, and a trihemitone. That of the soft diatonic is 12, 18, 30, by a hemitone, and three quadrantal dieses, and five quadrantal dieses. That of the intense diatonic is 12, 24, 24, by a hemitone, a tone, and a tone.*

It is observable in this division of Aristides Quintilianus, that the numbers made use of by him are double those used by Euclid; the reason is, that the two dieses in the sesquialteral chromatic are not so well defined by four parts and a half of thirty, as by 9 of 60; and it is evident that preserving the proportions, whether we take the number 30 or 60 for the gross content of the tetrachord, the matter is just the same.

Ptolemy, the most copious, and one of the most accurate of all the ancient harmonicians, has treated

* Aristides Quintilianus ex vers. Melb. pag. 18, et seq., in which passage it is observable that he sometimes uses the term *apuvia*, and others *evapuvia*, to signify the enarmonic genus.

very largely of the genera; and has, for the reason above given, adopted the number 60 for the measure of the tetrachord; he has represented the Aristoxenean constitution of the six species by the following proportions:—

Acute	48	44	42	36	30	24
Mean	6	8	9	12	18	24
Grave	6	8	9	12	12	12
	60	60	60	60	60	60
	Enarmonic	Chromatic soft	Chromatic sesquialteral	Chromatic tonic	Diatonic soft	Diatonic intense

In which proportions he agrees both with Euclid and Aristides Quintilianus; though, for the purpose of ascertaining them, he has preferred the numbers of the latter to those used by Euclid.

In chapter xiv. of his second book, Ptolemy has given the genera, with each of their several species, according to the five different musicians, namely, Archytas,† Aristoxenus, Eratosthenes,‡ Didymus, and himself. The sum of his account, omitting the division of Aristoxenus, for that is given above, is as follows:—

Archytas	{	Enarmonic	$\frac{4}{3} \times \frac{3}{2} \times \frac{2}{1} = \frac{4}{1}$
	{	Chromatic	$\frac{8}{7} \times \frac{7}{6} \times \frac{6}{5} = \frac{8}{5}$
	{	Diatonic	$\frac{9}{8} \times \frac{8}{7} \times \frac{7}{6} = \frac{9}{6}$
Eratosthenes	{	Enarmonic	$\frac{4}{3} \times \frac{3}{2} \times \frac{2}{1} = \frac{4}{1}$
	{	Chromatic	$\frac{7}{6} \times \frac{6}{5} \times \frac{5}{4} = \frac{7}{4}$
	{	Diatonic	$\frac{8}{7} \times \frac{7}{6} \times \frac{6}{5} = \frac{8}{5}$
Didymus	{	Enarmonic	$\frac{3}{2} \times \frac{2}{1} \times \frac{1}{1} = \frac{3}{1}$
	{	Chromatic	$\frac{4}{3} \times \frac{3}{2} \times \frac{2}{1} = \frac{4}{1}$
	{	Diatonic	$\frac{5}{4} \times \frac{4}{3} \times \frac{3}{2} = \frac{5}{2}$

In his own division Ptolemy supposes five species of the diatonic genus, which, together with the enarmonic, and two species of the chromatic, he thus defines:—

Ptolemy	{	Enarmonic	$\frac{4}{3} \times \frac{3}{2} \times \frac{2}{1} = \frac{4}{1}$
	{	Chromatic {	Soft $\frac{8}{7} \times \frac{7}{6} \times \frac{6}{5} = \frac{8}{5}$
	{	Intense	$\frac{9}{8} \times \frac{8}{7} \times \frac{7}{6} = \frac{9}{6}$
		Soft	$\frac{10}{9} \times \frac{9}{8} \times \frac{8}{7} = \frac{10}{7}$
	{	Tonic	$\frac{3}{2} \times \frac{2}{1} \times \frac{1}{1} = \frac{3}{1}$
		Ditonic	$\frac{5}{4} \times \frac{4}{3} \times \frac{3}{2} = \frac{5}{2}$
		Intense	$\frac{6}{5} \times \frac{5}{4} \times \frac{4}{3} = \frac{6}{3}$
		Equable	$\frac{7}{6} \times \frac{6}{5} \times \frac{5}{4} = \frac{7}{4}$

† There were two of this name, the one of Tarentum, a Pythagorean, famous, as Aulus Gellius and others relate, for having constructed an automaton in the form of a pigeon, which had the power of flying to a considerable distance; the other a musician of Mitylene. They are both mentioned by Diogenes Laertius, but it is not certain which of the two was the author of the division here given.

‡ Eratosthenes, a Cyrenean philosopher, and a disciple of Aristotle and Callimachus, was librarian at Alexandria to Ptolemy Evergetes. He was for his great learning esteemed a second Plato. An astronomical discourse of his is extant in the Oxford edition of Aratus; prefixed to which is an account of many other books of his writing now lost. He is said to have lived to the age of eighty-two; and, according to Heivicius, flourished about the Olympiad cxxxviii. that is to say, about two hundred and thirty years before Christ.

The above-mentioned edition of Aratus is a book not unworthy the notice of a learned musician, as containing a short but curious dissertation *De Musica antiqua Græcâ*, by the editor Mr. Edmund Chilmead. Aratus was an eminent astronomer and poet, contemporary with Eratosthenes; and in the Oxford publication is an astronomical poem, which it seems St. Paul alludes to in his speech at Athens, Acts xvii. ver. 28. 'As certain of your own poets have said.' Aratus was a Cilician, and a countryman of the Apostle. Vide Bentley's Sermons at Boyle's Lecture, Sermon II.

Martianus Capella gives this explanation of the genera :— 'The enarmonic abounds in small intervals, the diatonic in tones. The chromatic consists wholly of semitones, and is called chromatic, as partaking of the nature of both the others; for the same reason as we call that affection colour which is included between the extremes of white and black. The enarmonic is modulated towards the acumen, or, as we should now say, ascends by a diesis, diesis, and an incomposite ditone; the chromatic by a semitone, semitone, and an incomposite trihemitone: and the diatonic, content with larger intervals, proceeds by a semitone, tone, and tone: we now chiefly use the diatonic.' He says farther,— 'The possible divisions of the tetrachord are innumerable, but there are six noted ones, one of the enarmonic, three of the chromatic, and two of the diatonic. The first of the chromatic is the soft, the second is the hemiolian, and the third the tonian. The divisions of the diatonic are two, the one soft and the other robust. The enarmonic is distinguished by the quadrantal diesis, the soft chromatic by the triental diesis, and the hemiolian chromatic by the hemiolian diesis, which is equal to an enarmonic diesis and a half, or three eighths of a tone.* In all this Capella is but a copier of Aristides Quintilianus; and, in the judgment of his editor Meibomius, and others, he is both a servile and an injudicious one.

Boetius † has treated the subject of the genera in a manner less satisfactory than could have been expected from so scientific a musician: he mentions nothing of the species, but contents himself with an exhibition of the enarmonic, the chromatic, and diatonic, in three several diagrams, which are here given. He says that the diatonic is somewhat hard, but that the chromatic departs from that natural intension, and becomes somewhat more soft; and that the enarmonic is yet better constituted through the five tetrachords. The diatonic progression, he says, is by a semitone, tone, and tone; and that it is called diatonic, as proceeding by tones. He adds that the chromatic, which takes its name from the word Chroma, signifying colour, is, as it were, the first change or inflexion from that kind of intension preserved in the diatonic: and is sung by a semitone, a semitone, and three semitones; ‡ and that the enarmonic, which in his judgment is the most perfect of all the genera, is sung by a diesis and a ditone; a diesis, he says, is the half of a semitone. The following is his division of the tetrachord in each of the three genera :—

D I A T O N I C		
Semitone	Tone	Tone

* De Nuptiis Philologæ et Mercurii, lib. IX. De Generibus Tetrachordorum.

† Lib. I. cap. xxi.

‡ In a diagram of Glareanus, representing Boetius's division of the chromatic, the last interval is thus defined :— 'tris semitonis incomposita,' which epithet, as Boetius himself explains it, is not meant to signify that the semitones are incomplete, but that the interval constituted by them is to be considered as an integer, and uncompounded like the tone, without regard to its constituent parts. De Mus. lib. I. cap. xxxiii.

C H R O M A T I C		
Semitone	Semitone	Three semitones incomposite

E N A R M O N I C		
Diesis	Diesis	Ditone

He is somewhat more particular in his fourth book, chap. v., and again in the seventh chapter, for in the chromatic tetrachord he makes the semitones to be, the one a greater and the other a lesser; and the trihemitone he makes to consist of one greater and two lesser semitones.

TETRACHORD.

Nete hyperboleon			Nete hyperboleon			Nete hyperboleon		
D I A T E S A R O N. Ratio Sæquientia	Tone	2304	Three Hemitones, one greater and two lesser	Tone	2304	Ditone	Tone	2304
	Tone	2592 Paranete hyp.		Tone	2736		Tone	2736
	Hemitone lesser	2916 Trite hyperb.		Hemitone greater	2916 Trite hyperb.		Hemitone lesser	2916 Trite hyperb.
		3072 Nete diezeug. DIATONIC			3072 Nete diezeug. CHROMATIC			3072 Nete diezeug. ENARMONIC

It is somewhat remarkable that this author has said nothing of the colours or species of the genera, about which so much is to be met with in Ptolemy and other writers, except towards the conclusion of his work, where he professes to deliver the sentiments of Aristoxenus and Archytas on this head; but he seems rather to reprehend than adopt their opinions, for which it seems difficult to assign any reason, other than that he was, as his writings abundantly prove, a most strenuous assertor of the doctrines of Pythagoras.

Mersennus § has given a scale of the succession of sounds in each of the three genera, as near as it could be done, in the characters of modern notation, which is here inserted, and may serve to shew how ill the division of the tetrachord in the chromatic and enarmonic genera agree with the notions at this time entertained of harmony, and the natural progression of musical sounds.

§ Harmonic. De Generibus et Modis, pag. 97.

DIATONIC GENUS.

Tetrachord. hypaton. Tetrachord. parhypaton. Tetrachord. synemmenon. Tetrachord. diezeugmenon. Tetrachord. hyperborean.

RE, MI FA SOL LA, MI FA SOL LA, MI FA SOL LA, MI FA SOL LA, MI FA SOL LA.

Tone Semitone Tone Tone Semitone Tone Tone Semitone Tone Tone Semitone Tone Tone Semitone Tone Tone

CHROMATIC GENUS.

Semitone Semitone Tritone Semitone Semitone Third minor Semitone Semitone Third minor Semitone Semitone Third minor Semitone Semitone Tritone

ENARMONIC GENUS.

Diesis Diesis Ditone Diesis Diesis Ditone Diesis Diesis Third major Diesis Diesis Third major Diesis Diesis Ditone

Proslambanomenos Hypate hypaton Parhypate hypaton Lychnanthe hypaton Hypate meson Parhypate meson Lychnanthe meson Mese Tritone synemmenon Paraneite synemmenon Nete synemmenon Paraneite diezeugmenon Tritone diezeugmenon Paraneite diezeugmenon Nete diezeugmenon Tritone hyperborean Paraneite hyperborean Nete hyperborean

Other authors there are, particularly Franchinus, Vicentino, Vincentio Galilei, and Zarlino, that profess to treat of the genera; but it is to be noted that all their intelligence is derived from the same source, namely, the writings of Aristoxenus, Euclid, Aristides Quintilianus, and more especially Ptolemy; and therefore we find no other variation among them than what seems necessarily to arise from their different conceptions of the subject. Boetius himself can in this respect be considered no otherwise than as a modern; and he himself does not pretend to an investigation of the genera, but contents himself with a bare repetition of what is to be found in the writings of the ancients respecting them: and when it is considered that in his time only the diatonic genus was in use, the other genera having been rejected for their intricacy, and other reasons, long before, it must appear next to impossible that he could contribute much to the explanation of this most abstruse part of the science; and the excessive caution with which he delivers his sentiments touching them, is a kind of proof of the difficulties he had to encounter.

If this was the case with Boetius, how little is to be expected from the writers of later times. In short, for information as to the doctrine of the

genera, we are under an indispensable necessity of recurring to the ancients; and it will be much safer to acquiesce in their relations, defective and obscure as they are, than to trust to the glosses of modern authors, who in general are more likely to mislead than direct us: for this reason it has been thought proper to reject an infinitude of schemes, diagrams, and explanations, which the fertile inventions of the moderns have produced to exemplify the constitution of the chromatic and enarmonic genera, and that from a thorough persuasion that many of them are erroneous.

But it seems the considerations above suggested were not sufficient to deter a writer, who flourished in the sixteenth century, who, to say the least of him, appears to have been one of the ablest theorists of modern times, from attempting to develop the doctrine of the genera, and deliver it free from those difficulties.

The author here meant is Franciscus Salinas, a Spaniard by birth, and who, under all the disadvantages of incurable blindness, applied himself with the most astonishing patience and perseverance to the study of the theory of music; and in many respects the success of his researches has been equal to the degree of his resolution. His system of the

genera is much too copious to be inserted here; it is therefore referred to a part of this work reserved for an account of him and his writings.

Kircher has given a compendious view of the genera,* together with the proportions of their component intervals, in the tetrachord of each genus, by the help whereof we are enabled to form an idea of those various progressions that constitute the difference between the one and the other of them. But though he professes to have in his possession, and to have perused the manuscripts of Aristoxenus, Archytas, Didymus, Eratosthenes, and others,† he gives the preference to Ptolemy in respect to his division of the genera, and apparently follows the elder Galilei, not indeed in the order, but in the method of representation. According to him the species of the diatonic genus are five, namely, the ditonic or Pythagorean, the soft, the syntonous, the toniac, and the equable. The following is his definition and representation of them severally in their order, with his remarks on each:—

DITONIC or PYTHAGOREAN DIATONIC I.

‘The Pythagorean or ditonic diatonic consists in a progression from the grave to the acute, through the tetrachord, by the interval of a lesser semitone, and two tones, each in the ratio of 8 to 9; and contrarywise from the acute to the grave by two tones and a lesser semitone, as in the following example:—

TETRACHORD	6144	Hypate meson
	Sesqui octave tone, 8 to 9	
	6912	Lychanos hypaton
	Sesqui octave tone, 8 to 9	
	7776	Parypate hypaton
	Lesser semitone, 243 to 256	
	8192	Hypate hypaton

‘This kind of progression is said to have been held in great estimation by the philosophers, particularly Plato and Aristotle, as having a conformity with the composition of the world and with nature itself.

SOFT DIATONIC II.

‘The second or soft species of the diatonic genus proceeds from the grave to the acute by an interval, in the ratio of 20 to 21; the other intervals have a ratio, the one of 9 to 10, and the other of 7 to 8, as is here represented:—

TETRACHORD	63	Hypate meson
	Sesquiseptima, 7 to 8	
	72	Lychanos hypaton
	Sesquinona, 9 to 10	
	80	Parypate hypaton
	Sesquigesima, 20 to 21	
	84	Hypate hypaton

* Musurg. tom. I. lib. III. cap. xiii.

† Melibomius questions the truth of this assertion, upon the supposition that Archytas, Didymus, and Eratosthenes are to be reckoned among the scriptores perititi. It is true that, excepting a small astronomical tract of Eratosthenes, there is nothing of the writing of either of them in print. But it is said that in the library of St. Mark, at Venice, there are even now a great number of Greek manuscripts that were brought into Italy upon the sacking of Constantinople, and among them it is not impossible that some tracts of the above-named writers might be found.

SYNTONOUS DIATONIC III.

‘The third species, distinguished by the epithets *syntonum incitatum*, or hastened, proceeds from the grave to the acute by an interval in the ratio of 15 to 16, or greater semitone, a greater tone 8 to 9, and a lesser 9 to 10; and descends from the acute to the grave by the same intervals.

Greater terms.

TETRACHORD	Sequitertia.	36	Hypate meson
		Sesquinona, 9 to 10 tone minor	
		40	Lychanos hypaton
		Sesqui octave, 8 to 9 tone major	
		45	Parypate hypaton
	Sequitertia.	48	Sesqui undecima, 15 to 16 greater semit.
			Hypate hypaton

TONIAC DIATONIC IV.

‘The toniac, the fourth species of the diatonic genus, supposes such a disposition of the tetrachord as the first and second chords shall include an interval of 27 to 28; next an interval of 7 to 8, and lastly one of 8 to 9. Thus adjusted it will ascend from the grave to the acute, and on the contrary descend from the acute to the grave, as in the example:—

Greater terms.

TETRACHORD	168	Hypate meson
	Sesqui octave, 8 to 9	
	189	Lychanos hypaton
	Sesquiseptima, 7 to 8	
	216	Parypate hypaton
	Sesquigesimaseptima, 27 to 28	
	224	Hypate hypaton

EQUABLE DIATONIC V.

‘The fifth and last species of this genus is the equable, proceeding in arithmetical progression from the grave to the acute, by the ratios of 11 to 12, 10 to 11, and 9 to 10; and contrarywise from the acute to the grave:—

TETRACHORD	DIATESSARON	9	Hypate meson
		Sesquinona	
		10	Lychanos hypaton
		Sesquidecima	
		11	Parypate hypaton
		Sesqui undecima	
		12	Hypate hypaton

‘Ptolemy, whose fondness for analogies has already been remarked, resembles the tetrachord thus constituted to Theology and Politics.’

The chromatic genus, in the opinion of this author had three species, the ancient, the soft, and the syntonous, thus severally described by him:—

ANCIENT CHROMATIC I.

‘This species proceeded by two semitones, and a trihemitone, that is to say, it ascended from the grave to the acute, by a lesser semitone; then by an interval somewhat greater, as being in the ratio of

'81 to 76; and lastly by an incomplete trihemitone, 'in the ratio of 19 to 16:—

TETRACHORD	DIATESSARON	6144	Hypate meson
		Trihemitone, 16 to 19	
		7296	Lychanos hypaton
		Semitone, 76 to 81	
		7776	Parypate hypaton
		Lesser semitone, 243 to 256	
		8192	Hypate hypaton

SOFT CHROMATIC II.

'The chromatic molle was so disposed, as that the 'lowest chord and the next to it had a ratio of 27 to '28, the second and third 14 to 15, and the third and 'fourth 5 to 6:—

TETRACHORD	105	Hypate meson
	Sesquiquinta, 5 to 6	
	126	Lychanos hypaton
	Sesquiquartadecima, 14 to 15	
	135	Parypate hypaton
	Sesquivigesimaseptima, 27 to 28	
	140	Hypate hypaton

SYNTONOUS CHROMATIC III.

'In the chromatic syntonum the first and second 'chords, reckoning from the lowest, were distant by 'an interval in the proportion of 22 to 21, the second 'was removed from the third by an interval in the 'proportion of 12 to 11, and the third from the fourth 'by one of a sesquixesta proportion, which is as 6 to '7, as here is shewn:—

TETRACHORD	66	Hypate meson
	Sesquixesta, 6 to 7	
	77	Lychanos hypaton
	Sesquiundecima, 11 to 12	
	84	Parypate hypaton
	Sesquivigesima prima, 21 to 22	
	88	Hypate hypaton

'Of this genus it is said by Macrobius that it was 'deemed to be of an effeminate nature, and that it had 'a tendency to enervate the mind;* for which reason 'the ancients very seldom used it; Ptolemy resembles 'this tetrachord to *ceconomica*.'

The enarmonic, the third and last in order of the genera, seems to have been originally simple or undivided into species; but the refinements of Ptolemy led to a variation in the order of the enarmonic progression, which formed that species distinguished by his name, so that it may be said the enarmonic contained two species, the ancient and the Ptolemaic. Kircher thus defines it:—

ANCIENT ENARMONIC I.

'In this species the tetrachord ascended by two 'dieses, and an incomplete ditone, the several ratios whereof were as denoted by the following 'numbers:—

* Vide Macrobius in Somn. Scipion. Lib. II. cap. iv.

TETRACHORD	6144	Hypate meson
	Ditone	
	7776	Lychanos hypaton
	Diesis	
	7984	Parypate hypaton
	Diesis	
	8192	Hypate hypaton

ENARMONIC OF PTOLEMY II.

'The Ptolemaic enarmonic, which was scarce 'formed before both the chromatic and enarmonic 'grew into dis-esteem, ascended from the most grave 'to the next chord by an interval in the ratio of 45 'to 46, thence by one of 23 to 24, and lastly by one 'of 4 to 5, which is said to be a true enharmonic 'ditone:—

TETRACHORD	276	Hypate meson
	Sesquiquarta, 4 to 5	
	345	Lychanos hypaton
	Sesquivigesima tertia 23 to 24	
	360	Parypate hypaton
	Sesquiquadragesimaquinta, 45 to 46	
	368	Hypate hypaton

Dr. Wallis has treated this subject of the genera in a manner worthy of that penetration and sagacity for which he is admired. It has been mentioned, that of all the ancients Ptolemy has entered the most minutely into a discussion of this doctrine; he has delivered the sentiments of many writers, which but for him we should scarcely have known, and has adjusted the species in such a way as to leave it a doubt whether even Aristoxenus or he be the nearest the truth: Dr. Wallis published an edition of this valuable author, with a translation and notes of his own; to this work he has added an appendix, wherein is contained a very elaborate and judicious disquisition on the nature of the ancient music, and a comparison of the ancient system with that of the moderns. In this he has taken great pains to explain, as far as it was possible, the genera: the enarmonic and chromatic he gives up, and speaks of as irrecoverably lost; but of the diatonic genus he expresses himself with great clearness and precision; for, after defining, as he does very accurately, the several species of the diatonic, he says, that one only of them is now in practice; and, as touching the question which of them that one is, he gives the opinions of several musicians, together with his own; and lastly shows how very small and inconsiderable must have been the difference between those divisions that distinguish the species of the diatonic genus. His words are nearly these:—

'It now remains to discuss one point, which we 'have referred to this place, the genera and their 'colours or species. We have before said that for 'many years only one of them all has been received 'in practice, and this is by all allowed to be the 'diatonic; the enarmonic and all the chromatics, and 'the other diatonics, being laid aside. But it is 'matter of dispute whether it is the intense diatonic 'of Aristoxenus, or the ditonic diatonic of Ptolemy,

'or the intense diatonic of the same Ptolemy; that 'is to say, when we sing a diatessaron from MI or LA 'in the grave towards the acute in the syllables FA 'SOL LA, which express so many intervals, to ascertain 'the degree of magnitude which each of these intervals contains. The first opinion is that of Aristoxenus, who, when he made the diatessaron to 'consist of two tones and a half, would have the 'greatest sound FA, to be a hemitone, and the other 'two SOL LA, to be whole tones, which is the intense 'diatonic of this author.* And in this manner 'speak all musicians even to this day, at least when 'they do not profess to speak with nicety. But 'those who enter more minutely into the matter, 'will have what is understood by a hemitone to be, 'not exactly the half of, but somewhat a little less 'than a tone; and this is demonstrated by Euclid, 'who in other respects was an Aristoxenean, though 'I do not know whether he was the first that did 'it. Euclid, I say, admitting the principles of the 'Pythagoreans in estimating the intervals of sounds 'by ratios; and admitting also that a tone is in 'a sesquioctave ratio, in his harmonic introduction 'treats of the tones and hemitones in the same 'manner as do the Aristoxeneans; yet in his section 'of the canon he shows that what remains after 'subtracting two tones from a diatessaron is less than 'a hemitone, and is called a limma, which is in the 'ratio of $\frac{3}{4}\frac{5}{3}$; for if a diatessaron contains two tones 'and a half, then a diapason, which is two diatessarons 'and one tone, must contain six tones; but a diapason, 'which has a duple ratio, is less than six tones, for 'a sesquioctave ratio six times compounded is more 'than duple;† a diapason therefore is less than six 'tones, and a diatessaron less than two tones and 'a half.

CHAP. VIII.

'THE next opinion is that of those, who, instead 'of a tone, tone, and hemitone, substitute a tone, 'tone, and limma. And these, if at any time they 'call it a hemitone, would yet have us understand 'them to mean a limma, which differs very little from 'a hemitone, and therefore they will have the syllable LA to express a limma, and the syllables SOL LA 'two tones, that is $\frac{3}{4}\frac{5}{3} \times \frac{3}{4} \times \frac{5}{3} = \frac{5}{4}$, and this is the 'ditonic diatonic of Ptolemy, but which was shewn 'by Euclid before Ptolemy; and it was also the 'diatonic of Eratosthenes, as has been said above; 'and these have been the sentiments of musicians 'almost as low as to our own times. Ptolemy 'himself, though he has given other kinds of diatonic 'genera, does not reject this; and the rest who have 'spoken of this matter in a different way, did it 'more out of compliance with custom, than that they 'adhered to any contrary opinion of their own, as 'Ptolemy himself tells us, lib. I. cap. xvi. And 'thus Boetius divides the tetrachord, and after him 'Guido Aretinus, Faber Stapulensis, Glareanus, and 'others; it is true, however, that, about the begin-

'ning of the sixteenth century, Zarlino, and also 'Kepler, resumed the intense diatonic of Ptolemy, 'and attempted to bring it into practice;‡ but for 'this they were censured by the elder Galileo. §

'The third opinion, therefore, is that of those 'who, following Ptolemy, substituted in the place of 'a hemitone or limma, a sesquidecimaquinta ratio ' $\frac{1}{1}\frac{9}{8}$, which they also call a hemitone; and for the 'tones, both which the others had made to be in the 'ratio $\frac{9}{8}$, one they made to be in the ratio $\frac{1}{1}\frac{9}{8}$, so 'that they compounded the diatessaron by the ratios ' $\frac{1}{1}\frac{9}{8} \times \frac{9}{8} \times \frac{1}{1}\frac{9}{8} = \frac{27}{8}$, expressing by the syllable FA the 'ratio $\frac{1}{1}\frac{9}{8}$, by SOL that of $\frac{9}{8}$, and by LA $\frac{1}{1}\frac{9}{8}$,|| which 'is the intense diatonic of Ptolemy, and the diatonic 'of Didymus, except that he, changing the order, 'has $\frac{1}{1}\frac{9}{8} \times \frac{1}{1}\frac{9}{8} \times \frac{9}{8} = \frac{27}{8}$.

'And as they called $\frac{1}{1}\frac{9}{8}$ a greater hemitone, they 'made the lesser $\frac{3}{4}\frac{5}{3}$, which with $\frac{1}{1}\frac{9}{8}$ completes the 'lesser tone, as $\frac{1}{1}\frac{9}{8} \times \frac{3}{4}\frac{5}{3} = \frac{1}{1}\frac{9}{8}$, and is the difference, 'as they say, between the greater and the lesser 'third. Mersennus adds two other hemitones, one 'in the ratio $\frac{1}{1}\frac{3}{2}$, which with $\frac{1}{1}\frac{9}{8}$ completes $\frac{3}{4}$ the 'greater tone, and the other $\frac{3}{4}\frac{5}{3}$, which with $\frac{3}{4}\frac{5}{3}$ also 'makes up $\frac{3}{4}$ the greater tone.¶

The above is an impartial state of the several opinions that at different times have prevailed among the moderns, touching the preference of one or other of the species of the diatonic genus to the rest. Dr. Wallis is certainly right in saying, that to the time of Boetius, and so on to the end of the sixteenth century, the ditonic diatonic of Ptolemy prevailed, for so much appears by the writings of those several authors; and as to the latter part of his assertion, it is confirmed by the present practice, which is to consider the tetrachord as consisting of a sesquidecimaquinta ratio, a tone major, and a tone minor, and to this method of division he gives the preference; but he closes his relation with a remark that shews of how very little importance all enquiries are, which tend to adjust differences too minute for a determination by the senses, and cognizable only by the understanding, and that, too, not till after a laborious investigation. His words are these:—

'But as those species which we have mentioned 'differ so very little from one another, that the nicest 'ear can scarcely, if at all, distinguish them, since the 'ratio $\frac{1}{1}\frac{9}{8}$ from the ratio of a limma $\frac{3}{4}\frac{5}{3}$, as also the 'ratio of a greater tone $\frac{3}{4}$ from $\frac{1}{1}\frac{9}{8}$ differ only by the 'ratio $\frac{9}{10}$, which is so small that the ear can with 'difficulty discriminate between the one and the 'other of the two tones; we must therefore judge 'not so much by our senses, which opinion ought

‡ Dr. Wallis has a little mistaken Kepler in this place: it was not the intense diatonic of Ptolemy, but of Didymus $\frac{1}{1}\frac{9}{8} \times \frac{1}{1}\frac{9}{8} \times \frac{9}{8} = \frac{27}{8}$ that he was for resuming. Joann. Keplerus Harm. Mundi, lib. III. cap. vii.

§ Galileo did not content for the ditonic division of the diatonic, but for the intense of Aristoxenus, defined in his synopsis of the genera herein before given; the reason whereof was, that he was a lutenist, and the performers on that instrument unanimously prefer the Aristoxenean division.

¶ It may be proper to remark, that in this and other instances of solmisation that occur in the passage now quoting. Dr. Wallis uses the method of solmisation by the tetrachords, in which the syllables *ut* *re* *mi* *fa* are rejected, and which took place about the year 1650. See Clifford's Collection of Divine Services and Anthems, printed in the year 1664.

¶ Append. de Vet. Harm. 317, et seq.

* See the Synopsis, p. 30, of Dr. Wallis's Appendix, herein-before given.

† This is excellently demonstrated by Boetius, lib. III. cap. I.

'most to be regarded, because the senses would without any difficulty admit any of them, but reason greatly favours the last.*

There is yet another writer, with whose sentiments, and a few observations thereon, we shall conclude our account of the genera; this was Dr. John Christopher Pepusch, a man of no small eminence in his profession, and who for many years enjoyed, at least in England, the reputation of being the ablest theorist of his time. In a letter to Mr. Abraham de Moivre, printed in the *Philosophical Transactions* of the year 1746, No. 481, he proposes to throw some light upon the obscure subject of the ancient species of music; and after premising that, according to Euclid, the ancient scale must have been composed of tones major and limmas, without the intervention of tones minor, which in numbers are thus to be expressed, $\frac{9}{8}$ $\frac{256}{243}$ $\frac{8}{9}$ $\frac{27}{32}$ $\frac{3}{4}$ $\frac{16}{15}$ $\frac{2}{3}$, he proceeds in these words:—'It was usual among the Greeks to consider a descending as well as an ascending scale, the former proceeding from acute to grave precisely by the same intervals as the latter did from grave to acute. The first sound in each was the *proslambanomenos*. The not distinguishing these two scales, has led several learned moderns to suppose that the Greeks in some centuries took the *proslambanomenos* to be the lowest note in their system, and in other centuries to be the highest; but the truth of the matter is, that the *proslambanomenos* was the lowest or highest note according as they considered the ascending or descending scale. The distinction of these is conducive to the variety and perfection of melody; but I never yet met with above one piece of music where the composer appeared to have any intelligence of this kind. The composition is about one hundred and fifty or more years old, for four voices, and the words are,—'Vobis datum est noscere mysterium regni Dei, cæteris autem in parabolis; ut videntes non videant, et audientes non intelligant.' By the choice of the words the author seems to allude to his having performed something not commonly understood.' The doctor then exhibits an octave of the ascending and descending scales of the diatonic genus of the ancients, with the names of their several sounds, as also the corresponding modern letters, in the following form:—

A	Proslambanomenos	$\frac{9}{8}$	g
B	$\frac{3}{2}$ Hypate hypaton	$\frac{256}{243}$	f
C	$\frac{256}{243}$ Parhypate hypaton	$\frac{8}{9}$	e
D	$\frac{3}{2}$ Lychanos hypaton	$\frac{8}{9}$	d
E	$\frac{3}{2}$ Hypate meson	$\frac{243}{256}$	c
F	$\frac{256}{243}$ Parhypate meson	$\frac{8}{9}$	b
G	$\frac{3}{2}$ Lychanos meson	$\frac{8}{9}$	a
a	$\frac{3}{2}$ Mese		G

He observes, that in the octave above given, the *Proslambanomenos*, *Hypate hypaton*, *Hypate meson*, and *Mese*, were called *Stabiles*, from their remaining fixed throughout all the genera and species; and

that the other four, being the *Parhypate hypaton*, *Lychanos hypaton*, *Parhypate meson*, and *Lychanos meson*, were called *Mobiles*, because they varied according to the different species and varieties of music.

He then proceeds to determine the question what the genera and species were, in this manner:—'By genus and species was understood a division of the *diatessaron*, containing four sounds, into three intervals. The Greeks constituted three genera, known by the names of *Enarmonic*, *Chromatic*, and *Diatonic*. The *chromatic* was subdivided into three species, and the *diatonic* into two. The three *chromatic* species were, the *chromaticum molle*, the *sesquialterum*, and the *toniæum*. The two *diatonic* species were, the *diatonicum molle*, and the *intensum*; so that they had six species in all. Some of these are in use among the moderns, but others are as yet unknown in theory or practice.

I now proceed to define all these species by determining the intervals of which they severally consisted, beginning by the *diatonicum intensum* as the most easy and familiar.

The *diatonicum intensum* was composed of two tones and a semitone; but, to speak exactly, it consists of a semitone major, a tone minor, and a tone major. This is in daily practice, and we find it accurately defined by Didymus in Ptolemy's *Harmonics*, published by Dr. Wallis.†

The next species is the *diatonicum molle*, as yet undiscovered, as far as appears to me, by any modern author. Its component intervals are the semitone major, an interval composed of two semitones minor, and the complement of these two to the fourth, being an interval equal to a tone major and an *enarmonic diesis*.

The third species is the *chromaticum toniæum*, its component intervals are a semitone major succeeded by another semitone major, and lastly, the complement of these two to the fourth, commonly called a superfluous tone.

The fourth species is the *chromaticum sesquialterum*, which is constituted by the progression of a semitone major, a semitone minor, and a third minor. This is mentioned by Ptolemy as the

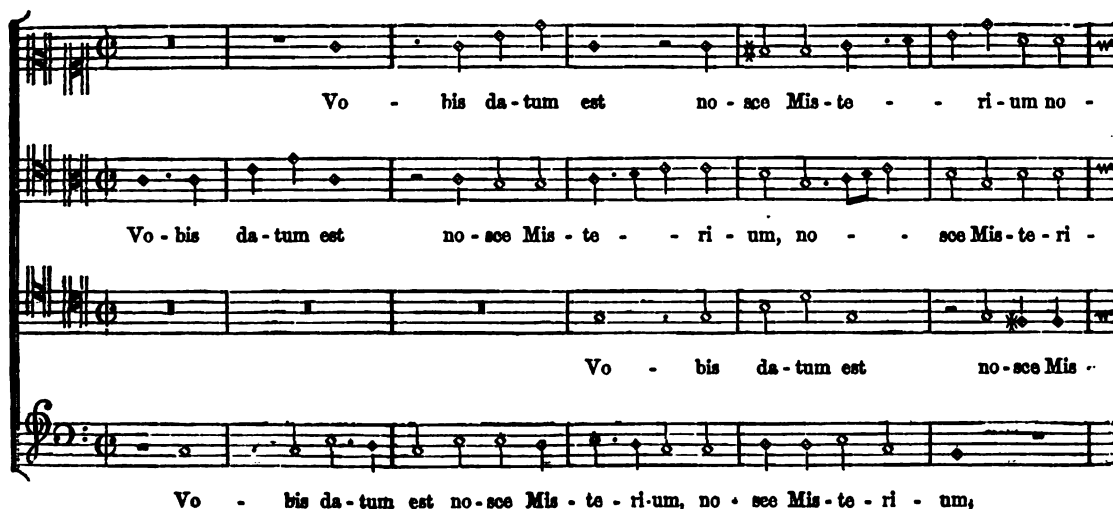
† Dr. Wallis has remarked in the passage above cited, that it had long been a matter of controversy whether the system of the moderns corresponded with the intense diatonic of Aristoxenus, the ditonic diatonic of Ptolemy, or rather Pythagoras, or the intense of Ptolemy; and though he seems to incline to the opinion of Zarlino, that the music now in use is no other than the intense diatonic of Ptolemy, it is far from clear that the moderns have gone farther than barely to admit in theory and in a course of numerical calculation the latter as the most eligible. Salinas, lib. III. cap. xiii. contends for an equality of tones, and for the consequent necessity of distributing throughout the diapason system those intervals by which the greater tones exceed the lesser.

Bontempi, Hist. Mus. 188. says that that temperament which makes the intervals irrational, is to be looked upon as a divine thing, and asserts that nowhere in Italy, nor indeed in Europe, does the practice of discriminating between the greater and lesser tone prevail in the tuning of the organ, and that the organ of St. Mark's chapel at Venice, where he himself sang for seven years, continued to be tuned without regard to this distinction, notwithstanding what Zarlino had written and the efforts he made to get it varied.

The practice has long been in tuning the organ, and such like instruments, to make the fifths as flat and the thirds as sharp as the ear will bear, which necessarily induces an inequality in the tones.

Lastly, Dr. Smith, in his *Harmonics*, second edition, pag. 33, asserts that since the invention of a temperament, the ancient systems of ditonic diatonic, intense diatonic, &c., have justly been laid aside. So that after so many opinions to the contrary, it may very well be doubted whether the *diatonicum intensum* is in daily practice or not.

‡ Chap. iv. ver. 9.



- sce Mis - te - ri - um, Vo - bis da - tum est no - sce Mis - te - ri -
 - um, Vo - bis da - tum est no - sce Mis - te - ri - um,
 - te - ri - um, Vo - bis da - tum est no - sce Mis - te - ri -
 Vo - bis da - tum est no - sce Mis - te - ri - um,

- um, Reg - ni De - i Ce - te - ris au - tem in Pa - ra - bo - lis,
 Reg - ni De - i Ce - te - ris au - tem in Pa - ra - bo - lis,
 - um, Reg - ni De - i Ce - te - ris au - tem
 Reg - ni De - i Ce - te - ris au - tem

Ut vi - den - tes non vi - de - ant, Et au - di -
 Ut vi - den - tes non vi - de - ant, Et au - di -
 in Pa - ra - bo - lis, Ut vi - den - tes non vi - de - ant,
 in Pa - ra - bo - lis, Ut vi - den - tes non vi - de - ant,

- en - tes, et au - di - en - tes non in - tel - li -
 - en - tes, et au - di - en - tes non in - tel - ligant, non in - tel - li -
 Et au - di - en - tes non in - tel - li - gant, non in - tel - li -
 Et au - di - en - tes non in - tel - li - gant, non in - tel - li -



gant, Ut vi-den - tes non vi-de - ant, et au-di -
 gant, Ut vi-den - tes non vi-de - ant, et au-di -
 gant, Ut vi-den - tes, ut vi-den - tes non vi - de - ant,
 gant, Ut vi-den - tes non vi-de - ant, ut vi-den - tes non vi - de - ant,
 en - tes, et au-di - en - tes non in - tel - li - gant.
 en - tes, et au-di - en - tes non in - tel - li - gant, non in - tel - li - gant.
 et au-di - en - tes non in - tel - li - gant, non in - tel - li - gant.
 et au-di - en - tes non in - tel - li - gant, non in - tel - li - gant.

Artusi observes upon this composition, which, the better to shew the contrivance of it, is here given in score, that it is a motet for four voices, and that it may be sung two ways, that is to say, first, as the cliffs direct that are placed nearest to the notes, and afterwards turning the top of the book downwards, from the right to the left; taking the extreme cliff for a guide in naming the notes; the consequence whereof will be, that the base will become the soprano, the tenor the contralto, the contralto the tenor, and the soprano the base. Besides this, he says that the second time of singing it, *b* must be assumed for *x*, and in other instances *fa* for *mi*. He concludes with a remark upon the words of this motet, that they indicate that it is not given to every one to understand compositions of this kind.

Upon the example above adduced the remark is obvious, that it falls short of proving the use of both an ascending and descending scale by the Greek harmonicians. In a word, it is evidence of nothing more than the antiquity of a kind of composition, of which it is probable Costanzo Porta might be the inventor, namely that, where the parts are so contrived as to be sung as well backwards as forwards. In this he has been followed by Pedro Cerone, and other Spanish musicians, and by our own countryman Elway Bevin, and others, who seem to have thought that the merit of a musical composition consisted more in the intricacy of its construction than in its aptitude to produce the genuine and natural effects

of fine harmony and melody on the mind of an unprejudiced hearer.

From the foregoing representations of the genera, the reasons for the early preference of the diatonic to the chromatic and enarmonic are clearly deducible; but notwithstanding these and the consequent rejection of the latter two by Guido and all his followers, the ingenuity of a few speculative musicians has betrayed them into an opinion that they are yet actually existing, and that with the addition of a few intervals, occasionally to be interposed among those that constitute the diapason, both the chromatic and enarmonic genera may be brought into practice.

The first of these bold assertors was Don Nicola Vicentino, an author of whom farther mention will hereafter be made. In a work entitled '*L'Antica Musica ridotta alla Moderna Pratica*,' published by him at Rome in 1555, we find not only the tetrachord divided in such a manner as seemingly to answer the generical division of the ancients, but compositions actually exhibited, not only in one and the other of the genera, but in each of them severally, and in all of them conjunctly, and this with such a degree of persuasion on his part that he had accurately defined them, as seems to set all doubt at defiance.

It is true that little less than this was to be expected from an author who professes in the very title of his book to reduce the ancient music to modern practice, but that he has succeeded in his

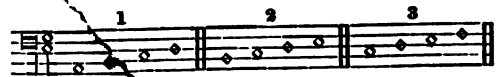
attempt so few are disposed to believe, that in the general estimation of the most skilful professors of the science, Vicentino's book has not its fellow for musical absurdity.* And of the justice of this censure few can entertain a doubt, that shall peruse the following account of himself and of his studies:—

'To shew the world that I have not grudged the labour of many years, as well for my own improvement, as to be useful to others, in the present work I shall publish all the three genera with their several species and commixtures, and other inventions never given to the world by any body; and shall shew in how many ways it is possible to compose variously in the sharp and flat modes: though at present there are some professors of music that blame me for the trouble I take in this kind of learning, not considering the pains that many celebrated philosophers have taken to explain the doctrine of harmonics; nevertheless I shall not desist from my endeavours to reduce to practice the ancient genera with their several species by the means of voices and instruments; and if I shall fail in the attempt, I shall at least give such hints to men of genius as may tend to the improvement of music. We see by a comparison of the music that we use at present, with that in practice a hundred, nay ten years ago, that the science is much improved; and I doubt not but that these improvements of mine will appear strange in comparison with those of our posterity, and the reason is, that improvements are continually making of things already invented, but the invention and beginning of every thing is difficult; therefore I rejoice that God has so far favoured me, that in these days for his honour and glory I am able to shew my honourable face among the professors of music. It is true that I have studied hard for many years; and as the divine goodness was pleased to enlighten me, I began this work in the fortieth year of my age, in the year 1550, the jubilee year, in the happy reign of Pope Julius the Third; since that I have gone on, and by continual study have endeavoured to enlarge it, and to compose according to the precepts therein contained, as likewise to teach the same to many others, who have made some progress therein, and particularly in this illustrious town of Ferrara, where I dwell at present, to the inhabitants whereof I have explained both the theory and practice of the art; and many lords and gentlemen who have heard the sweetness of this harmony have been charmed therewith, and have taken pains to learn the same with exquisite diligence, because it really comprehends what the ancient writers shew. As to the diatonic genus, it was in use in the music sung at public festivals, and in common places, but the chromatic and enarmonic were reserved for the private diversion of lords and princes, who had more refined ears than the vulgar, and were used in celebrating the praises of great persons and heroes. And, not to detract from the

'virtues of the ancient princes, the most excellent prince of Ferrara, Alfonso d'Este, after having very much countenanced me, has with great favour and facility learned the same, and thereby shown to the world the image of a perfect prince; and he, as he has a most worthy name of eternal glory in arms, so has he acquired immortal honours by his skill in the sciences.†

In the prosecution of this his notable design of accommodating the ancient music to modern practice, Vicentino has exhibited in the characters of modern notation a diatonic, a chromatic, and an enarmonic fourth and fifth in all their various forms. The following is an example of their several varieties, taken from the third book of his work above-cited, pages 59 a, 59 b, 62 b, et seq.:—

DIATONIC FOURTHS.



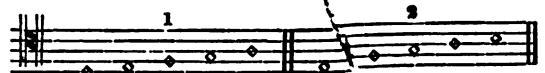
CHROMATIC FOURTHS.



ENARMONIC FOURTHS.



DIATONIC FIFTHS.



CHROMATIC FIFTHS.



ENARMONIC FIFTHS.



Having thus adjusted the several intervals of a fourth and fifth in each of the three genera, the author proceeds to exhibit certain compositions of his own in each of them; and first we have a motet composed by himself, and sung, as he says, in his

* This is remarked by Gio Battista Doni, in his treatise entitled *De Præstantia Musicæ veteris*. Florent. 1647, and numberless other writers. Kircher, however, seems to entertain a different opinion of it; his sentiments are given at length in a subsequent page of this chapter.

† Libro primo, cap. iv.

church on the day of the resurrection, as a specimen of the true chromatic:—

Al-le-lu-ia, Al-le-lu-ia, Al-le-lu-ia,
Al-le-lu-ia, Al-le-lu-ia, hæc di-es
quam fe-cit do-mi-nus, hæc di-es quam fe-cit
do-mi-nus, quam fe-cit do-mi-nus;
Ex-ul-te-mus et le-te-mur, ex-ul-te-mus et le-
-te-mur in e-a, et le-te-mur in e-a.

Al-le-lu-ia, Al-le-lu-ia, Al-le-lu-ia,
Al-le-lu-ia, Al-le-lu-ia, hæc di-es quam
fe-cit do-mi-nus, hæc di-es, hæc di-es quam
fe-cit do-mi-nus, quam fe-cit do-mi-nus;
Ex-ul-te-mus et le-te-mur, ex-ul-te-mus et le-
-te-mur in e-a, et le-te-mur in e-a.

Al-le-lu-ia, Al-le-lu-ia, Al-le-lu-ia,
Al-le-lu-ia, Al-le-lu-ia, hæc di-es quam
fe-cit ij do-mi-nus, hæc di-es quam fe-cit
do-mi-nus, quam fe-cit do-mi-nus; Ex-ul-
-te-mus et le-te-mur, ex-ul-te-mus et le-
-te-mur in e-a, et le-te-mur in e-a.

Al-le-lu-ia, Al-le-lu-ia, Al-le-lu-ia,
Al-le-lu-ia, Al-le-lu-ia, hæc
di-es quam fe-cit do-mi-nus, hæc di-es
quam fe-cit do-mi-nus; Ex-ul-te-
-mus et le-te-mur, ex-ul-te-mus et le-te-
-mur in e-a, et le-te-mur in e-a.

Alleluia.

As an example of the enarmonic, he gives the following, which is the beginning of a madrigal in four parts:—

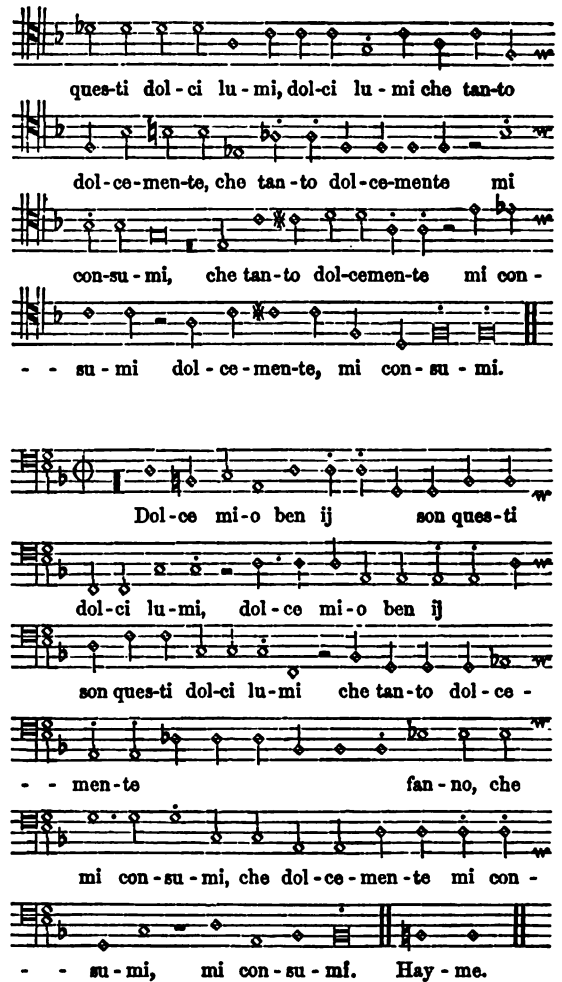
So-av' e dol-c'ar-do-re ij che fra piante sos-pi-ri, che fra pi-an-te sos-pi-ri
So-av' e dol-c'ar-do-re ij che fra piante sos-pi-ri ij
So-av' e dol-c'ar-do-re ij che fra piante sos-pi-ri ij
So-av' e dol-c'ar-do-re ij che fra piante sos-pi-ri - pian

NOTE.—Vicentino has not been particular in explaining the use of the points over many of the notes in this and the following examples of the enarmonic; but from the practice of Salinas and other writers it is presumed that the point is intended to denote the enarmonic diesis as defined in the foregoing representations of that genus.

And as a proof of the practicability of uniting all the genera in one composition, he exhibits the following madrigal for four voices, which he says may be sung in five ways, that is to say, as diatonic, as chromatic, as chromatic and enarmonic, as diatonic and chromatic, and lastly as diatonic, chromatic, and enarmonic :—



Dol-ce mi-o ben ij son questi dol-ci
lu-mi, dol-ci lu-mi, dol-ce mio ben son questi
dol-ci lu-mi son questi, dol-ci lu-mi che
tan-to, dol-ce-men-te che tan-to, dol-ce-men-te
mi con-su-mi, che tan-to dol-ce-men-te fan-no,
che dol-ce-men-te mi con-su-mi, mi con-su-mi.
Dol-ce mio ben ij son questi dol-ci
lu-mi, dol-ce mi-o ben ij son ques-ti,
dol-ci lu-mi, dol-ci lu-mi, che tan-to, che tan-to,
dol-ce-mente fan-no, che dol-cemen-te, che dol-
ce-mente mi con-su-mi, mi con-su-mi, fan-no che
dol-ce-men-te mi con-su-mi, mi con-su-mi.
Dol-ce mi-o ben son questi dol-ci lu-mi,
mi, dol-ce mio ben son ques-ti dol-ci lu-mi, son



ques-ti dol-ci lu-mi, dol-ci lu-mi che tan-to
dol-ce-men-te, che tan-to dol-ce-mente mi
con-su-mi, che tan-to dol-cemen-te mi con-
su-mi dol-ce-men-te, mi con-su-mi.
Dol-ce mi-o ben ij son ques-ti
dol-ci lu-mi, dol-ce mi-o ben ij
son ques-ti dol-ci lu-mi che tan-to dol-ce-
men-te fan-no, che
mi con-su-mi, che dol-ce-men-te mi con-
su-mi, mi con-su-mi. Hay-me.

Kircher seems to think that Vicentino has succeeded in this his attempt to restore the ancient genera; and if he has, either the discovery was of no worth, or the moderns have a great deal to answer for in their not adopting it. The following are the sentiments of Kircher touching Vicentino and his endeavours to reduce the ancient music to modern practice:—'The first that I know of who invented the method of composing music in the three genera, according to the manner of the ancients, was Nicolaus Vicentinus; * who when he perceived that the division of the tetrachords according to the three genera by Boetius could not suit a polyphonus melothesia and our ratio of composition, devised another method, which he treats of at large in an entire book. There were, however, not wanting some, who being strenuous admirers and

* Kircher is mistaken in his assertion that Vicentino was the first who attempted the revival of the ancient genera; for it seems that Giovanni Spataro, of Bologna, in the year 1512, made an attempt of that kind, but without success. *Storia della Musica di Giambattista Martini*, tom. I. pag. 126, in not.

But notwithstanding the discouragements the two writers above-mentioned met with, Domenico Mazzochi, of Rome, about the year 1600, attempted a composition in all the three genera, entitled *Pianctus Matris Euryalis*, which is printed in the *Musurgia*, tom. I. pag. 660.

'defenders of ancient music, cavilled at him wrongfully and undeservedly for having changed the genera that had been wisely instituted by the ancients, and put in their stead I know not what spurious genera; but those who shall examine more closely into the affair will be obliged to confess that Vicentinus had very good reason for what he did, and that no other chromatic enarmonic polyphonus melothesia could be made than as he taught.*

This declaration of Kircher is not easily to be reconciled with those positive assertions of his in the *Musurgia*, that the ancients were strangers to polyphonus music; and the examples above given are all of that kind.

But waving this consideration, whoever will be at the pains of examining these several compositions, will find it a matter of great difficulty to reconcile them with the accounts that are given of the manner of dividing the tetrachord in the several genera; he will not be able easily to discover the chromatic interval of three incomposite semitones; much less will he be able to make out the enarmonic diesis; and much greater will be his difficulty to persuade himself, or any one else, that either of the above compositions can stand the test of an ear capable of distinguishing between harmony and discord.

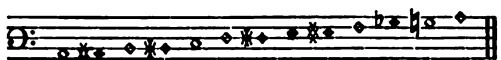
But all wonder at this attempt of Vicentino must cease, when it is known that he contended with some of the greatest musicians, his contemporaries, that the modern or Guidonian system was not simply of the diatonic kind, but compounded of all the three genera. He has himself, in the forty-third chapter of his fourth book, given a most curious relation of a dispute between him and a reverend father on this subject, which produced a wager, the decision whereof was referred to two very skilful professors, who gave judgment against him. An account of this dispute is contained in a subsequent chapter of the present work.

CHAP. IX.

It does not anywhere appear that the music which gave rise to the controversy between Vicentino and his opponents, was any other than what is in use at this day; which that it is the true diatonic of the ancients is more than probable; though, whether it be the diatonicum Pythagoricum, or the diatonicum intensum of Aristoxenus, of Didymus, or of Ptolemy, has been thought a matter of some difficulty to ascertain, but is of little consequence in practice.

But we are not to understand by this that the music now in use is so purely and simply diatonic, as in no degree to participate of either the enarmonic or chromatic genus, for there is in the modern scale such a commixture of tones and semitones as may serve to warrant a supposition that it partakes in some measure of the ancient chromatic; and that it does so, several eminent writers have asserted, and seems to be the general opinion. Monsieur Brossard says, that after the division of the tone between the

Mese and Paramese of the ancients, which answer to our A and H , into two semitones, it was thought that the other tones might be divided in like manner; and that therefore the moderns have introduced the chromatic chords of the ancient scale, and thereby divided the tones major in each tetrachord into two semitones: this, he adds, was effected by raising the lowest chord a semitone by means of this character, \sharp , which was placed immediately before the note so to be raised, or on its place immediately after the cliff. Again he says, that it having been found that the tones minor terminating the tetrachords upwards were no less capable of such division than the tones major, they added the chromatic chords to the system, and in like manner divided the tones minor, so that the octave then became composed of thirteen sounds and twelve intervals, eight of which sounds are diatonic or natural, distinguished in the following scheme by white notes thus, \circ and five chromatic by black ones thus, \bullet with the sharp sign, which Brossard calls a double diesis prefixed to each of the notes so elevated:—



This, though a plausible, is a mistaken account of the matter; for first it is to be observed, this introduction of the semitones into the system, was not for the purpose of a progression of sounds different from that in the diatonic genus: on the contrary, nothing more was intended by it than to render it subservient to the diatonic progression; or, in other words, to institute a progression in the diatonic series from any given chord in the diapason, and we see the design of this improvement in its effects.

For, to assume the language of the moderns, if we take the key of E, in which no fewer than four of the sharp signatures are necessary, it is evident to demonstration that in the system of the diapason the tones and semitones will arise precisely in the same order as they do in the key of C, where not one of those signatures are necessary, and the same, *mutatis mutandis*, may be said of all the other keys with the greater third; and the like will be found in those with the lesser third, comparing them with that of A, the prototype of them all.†

From hence it follows, that the use of the above signatures has no effect either in the intension or remission of the intervals; but the same remain, notwithstanding the application of them the same as in the diatonic genus.

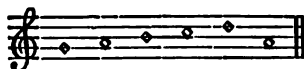
It is true, that since the invention of polyphonus or symphoniacal music, a species of harmony of which the ancients seem to have been totally ignorant; among the various combinations that may occasionally occur in a variety of parts, some may arise that shall nearly answer to the chromatic intervals, and it shall sometimes happen that a given note shall have for its accompaniment those sounds that constitute a chromatic tetrachord; and of this opinion are some of the most skilful modern organists,

† † Dictionnaire de Musique, Article SYSTEMA.
‡ See this demonstrated in the next book.

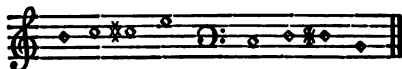
* Musurg. tom. I. pag. 637.

who are inclined to think that they sometimes use the chromatic intervals, without knowing that they do so.* But the question in debate can only be determined by a comparison of the melody of the moderns with that of the ancients; and in that of the moderns we meet with no such progression as that which is characterised by three incomposite semitones and two semitones, which is the least precise division of the tetrachord that any of the ancients have given us.

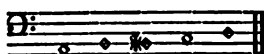
Our countryman Morley gives his opinion of the matter in the following words:—‘The music which we now use is neither just diatonic, nor right chromatic. Diatonicum is that which is now in use, and riseth throughout the scale by a whole note, a whole note, and a lesser or half note. A whole note is that which the Latins call Integer Tonus, and is that distance which is betwixt any two notes, except *mi* and *fa*; for betwixt *mi* and *fa* is not a full halfe note, but is lesse than halfe a note by a comma, and therefore called the lesser halfe note, in this manner:—



‘Chromaticum is that which riseth by semitonium minus, or the less halfe note, the greater halfe note, and three halfe notes thus:—

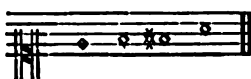


‘The greater halfe note betwixt *fa* and *mi* in *b fa h mi*. Enarmonicum is that which riseth by diesis, diesis (diesis is the halfe of the lesse halfe note) and ditonus; but in our musicke I can give no example of it, because we have no halfe of a lesse semitonium; but those who would shew it set down this example

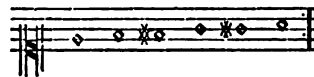


‘of enarmonicum, and mark the diesis thus x as it were the halfe of the apotome or greater halfe note, which is marked thus *. This sign of the more halfe note we now-a-daies confound with our b square, or signe of *mi* in *h mi*, and with good reason; for when *mi* is sung in *b fa h mi*, it is in that habitude to *a la mi re*, as the double diesis maketh *F fa ut* sharpe to *E la mi*, for in both places the distance is a whole note; but of this enough: and by this which is already set downe, it may evidentlie appeare that this kind of musick which is usual now-a-daies, is not fully and in every respect the ancient diatonicum; for if you begin any four notes, singing *ut, re, mi, fa*, you shall not find either a flat in *E la mi*, or a sharp in *F fa ut*; so that it must needes follow that it is neither just diatonicum nor right chromaticum.

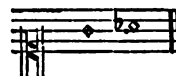
* It is also said, that in passages of notes in succession the chromatic intervals sometimes occur. The following not uncommon passage is said to be an example of the hemiolian or sesquialteral chromatic:—



‘Likewise by that which is said it appeareth this point, which our organists use—



‘is not right chromatica, but a bastard point, patched up of halfe chromaticke and half diatonick. Lastlie, it appeareth by that which is said, that those virginals which our unlearned musytians cal cromatica (and some also grammatica) be not right chromatica, but half enharmonica; and that al the chromatica may be expressed uppon our common virginals except this:—



‘for if you would thinke that the sharpe in *g sol re ut* would serve that turne by experiment, you shall find that it is more than halfe a quarter of a note too low.†

From hence we may conclude in general, that the system as it stands at present, is not adapted to the chromatic genus; and were there a possibility, which no one can admit, of rendering the chromatic tolerable to a modern ear, the revival of it would require what has often been attempted in vain, a new and a better temperament of the system than the present.

From the several hypotheses above stated, and the different methods of dividing the tetrachord in each genus, it clearly appears that among the most ancient of the Greek harmonicians there was a great diversity of opinions with respect to the constitution of the genera. And it also appears that both the chromatic and enarmonic gave way to the diatonic, as being the most natural, and best adapted to the general sense of harmony; indeed it is very difficult to account for the invention and practice of the former two, or to persuade ourselves that they could ever be rendered grateful to a judicious ear. And after all that has been said of the enarmonic and chromatic, it is highly probable that they were subservient to oratory, or in short that they were modes of speaking and not of singing, the intervals in which they consist not being in any of the ratios which are recognized by the ear as consonant.

Another subject in harmonics, no less involved in obscurity, is the doctrine of the Modes, Moods, or Tones, for so they are indiscriminately termed by such as have professed to treat of them. The appellation of Moods has indeed been given to the various kinds of metrical combination, used as well in music as poetry, and were the word Tone less equivocal than Mode, it might with propriety be substituted in the place of the former. Euclid has given no fewer than four senses in which the word Tone is accepted;‡ whereas that of Mode or Mood is capable of but two; and when it is said that these appellations refer to subjects so very different from each other as sound

† Plaine and easie Introduction to Practicall Musicke. Annotations on Part I.

‡ Introd. Harmon. ex. vers. Melbom. pag. 19. et vide Melb. in loc citat.

and duration, that is to say tone and time, there can be little doubt which of the two is to be preferred.

To consider the term *Mode* in that which is conceived to be its most eligible sense, it signifies a certain series or progression of sounds. Seven in number at least are necessary to determine the nature of the progression; and the distinction of one mode from another arises from that chord in the system from whence it is made to commence; in this respect the term *Mode* is strictly synonymous with the word *Key*, which at this day is so well understood as to need no explanation.

As to the number of the modes, there has subsisted a great variety of opinions, some reckoning thirteen, others fifteen, others twelve, and others but seven; and, to speak with precision, it is as illimitable as the number of sounds. The sounds that compose any given series, with respect to the degree of acumen or gravity assigned to each, are capable of an innumerable variety; for as a point or a line may be removed to places more or less distant from each other ad infinitum; in like manner a series of sounds may be infinitely varied, as well with respect to the degree of acumen or gravity, as the position of each in the system;* we are therefore not to wonder at the diversity of opinions in this respect, or that while some limit the modes to seven, others contend for more than double that number.

At what time the modes were first invented does no where clearly appear. Bontempi professes himself at a loss to fix it;† but Aristides Quintilianus intimates that they were known so early as the time of Pythagoras;‡ and considering the improvements he made, and that it was he who perfected the great or immutable system, it might naturally be supposed that he was the inventor of them; but the contrary of this is to be inferred from a passage in Ptolemy, who says that the ancients supposed only three modes, the Dorian, the Phrygian, and the Lydian,§ denominations that do but ill agree with the supposition that any of them were invented by Pythagoras, who it is well known was a Samian. But farther, Aristides Quintilianus, in the passage above referred to, has given the characteristic letters of all the fifteen modes according to Pythagoras; so that admitting him to have been the inventor of the additional twelve, the institution of the three primitive modes is referred backwards to a period anterior to that in which the system is said to have been perfected.

Euclid relates that Aristoxenus fixed the number of the modes at thirteen, that is say, 1. The Hypermixolydian or Hyperphrygian. 2. The acuter Mixolydian, called also the Hyperastian. 3. The graver Mixolydian, called also the Hyperdorian. 4. The acuter Lydian. 5. The graver Lydian, called also the Æolian. 6. The acuter Phrygian. 7. The graver Phrygian, called also the Iastian. 8. The Dorian. 9. The acuter Hypolydian. 10. The graver Hypolydian, called also the Hypoæolian. 11. The

acuter Hypophrygian. 12. The graver Hypophrygian, called also the Hypoastian. 13. The Hypodorian.¶ The most grave of these was the Hypodorian; the rest followed in a succession towards the acute, exceeding each other respectively by a hemitone; and between the two extreme modes was the interval of a diapason.¶¶

The better opinion however seems to be, that there are in nature but seven, and as touching the diversity between them, it is thus accounted for. The Proslambanomenos of the hypodorian, the gravest of all the modes, was, in the judgment of the ancients, the most grave sound that the human voice could utter, or that the hearing could distinctly form a judgment of; they made the Proslambanomenos of the hypoiastian or graver hypophrygian to be acuter by a hemitone than that of the hypodorian; and consequently the Hypate of the one more acute by a hemitone than the Hypate of the other, and so on for the rest; so that the Proslambanomenos of the hypoiastian was in the middle, or a mean between the Proslambanomenos of the hypodorian and its Hypate hypaton. The Proslambanomenos of the acuter hypophrygian was still more acute by a hemitone, and consequently more acute by a whole tone than the hypodorian, and therefore it coincided with the Hypate hypaton of that mode, as is thus represented by Ptolemy, lib. II. cap. xi.**

ACUTE

—————	Hypermixolydian
Tone	
—————	Mixolydian
Limma	
—————	Lydian
Tone	
—————	Phrygian
Tone	
—————	Dorian
Limma	
—————	Hypolydian
Tone	
—————	Hypophrygian
Tone	
—————	Hypodorian

GRAVE

Those who contended for fifteen modes, among whom Alypius is to be reckoned, to the thirteen above enumerated, added two others in the acute, which they termed the Hyperlydian and Hyperæolian.††

But against this practice of increasing the modes by hemitones, Ptolemy argues most strongly in the eleventh chapter, and also in the four preceding chapters of the second book of his Harmonics: and indeed were it to prevail, the modes might be multiplied without end, and to no purpose. Notwithstanding this, Martianus Capella contends for fifteen and Glareanus for twelve modes; but it is to

* Wallis, Append. de Vet. Harm. pag. 312.

† Histor. Mus. pag. 136.

‡ Lib. I. pag. 28, ex. vers. Meibom.

§ Harmonicor. lib. II. cap. vi. x. ex vers. Wallis.

¶ Euclid. Introd. Harm. pag. xx.

¶¶ Wallis, Append. de Vet. Harm. pag. 312.

** Ibid. pag. 313.

†† Wallis, Append. pag. 312.

be observed, that both these latter writers are, in respect of the Greek harmonicians, considered as mere moderns; and besides these there are certain other objections to their testimony, which will be mentioned in their proper place.

As to the two additional modes mentioned by Alypius, they seem to have been added to the former thirteen, more with a view to regularity in the names and positions of the modes, than to any particular use; and perhaps there is no assignable period of time during which it may with truth be said, that more than thirteen were admitted into practice.

Ptolemy however rejects as spurious six of the thirteen allowed by the Aristoxeneans, and this in consequence of the position he had advanced, that it was not lawful to encrease the modes, by a hemitone. It is by no means necessary to give his reasons at large for limiting the number to seven, as his doctrine contains in it a demonstration that the encrease of them beyond that number was rather a corruption than an improvement of the harmonic science. As to the three primitive modes, the Dorian, the Phrygian, and the Lydian, each of them was situated at the distance of a sesquioctave tone from that next to it,* and therefore the two extremes were distant from each other two such tones; or, in other words, the Phrygian mode was more acute than the Dorian by one tone, and the Lydian more acute than the Phrygian by one tone; consequently the Lydian was more acute than the Dorian by two tones.

To these three modes Ptolemy added four others, making together seven, which, as he demonstrates, are all that nature can admit of. As to the Hypermixolydian, mentioned by him in the tenth chapter of his second book, it is evidently a repetition of the hypodorian.

MIXOLYDIAN

LYDIAN

PHRYGIAN

DORIAN

HYPOLYDIAN

HYPOPHRYGIAN

HYPODORIAN†

The above is the order in which they are given by Euclid, Gaudentius, Bacchius, and Ptolemy himself, though the latter, in the eleventh chapter of his second book, has varied it by placing the Dorian first, and in consequence thereof transposing all the rest; but this was for a reason which a closer view of the subject will make it unnecessary to explain.

Having proceeded thus far in the endeavour to distinguish between the legitimate and the spurious modes, it may now be proper to enter upon a more particular investigation of their natures, and see if it be not possible, notwithstanding that great diversity of opinion that has prevailed in the world, to draw from those valuable sources of intelligence the ancient harmonic writers, such a doctrine as may

afford some degree of satisfaction to a modern enquirer. It must be confessed that this has been attempted by several writers of distinguished abilities, and that the success of their labours has not answered the expectations of the world. The Italians, particularly Franchinus, or as he is also called, Gaffurius, Zaccane, Zarlino, Galilei, and others, have been at infinite pains to explain the modes of the ancients, but to little purpose. Kircher has also undertaken to exhibit them; but notwithstanding his great erudition and a seeming certainty in all he advances, his testimony is greatly to be suspected; and, if we may believe Meibomius, whenever he professes to explain the doctrines of the ancients, he is scarcely intitled to any degree of credit. The reason why these have failed in their attempts is obvious, for it was not till after most of them wrote, that any accurate edition of the Greek harmonicians was given to the world: so lately as the time when Morley published his Introduction, that is to say in the reign of queen Elizabeth, it was doubted whether the writings of some of the most valuable of them were extant even in manuscript; and it seemed to be the opinion that they had perished in that general wreck of literature which has left us just enough to guess at the greatness of our loss.

To the several writers above-mentioned we may add Glareanus of Basil, a contemporary and intimate friend of Erasmus; but he confesses that he had never seen the Harmonics of Ptolemy, nor indeed the writings of any of the Greek Harmonicians, and that for what he knew of them he was indebted to Boetius and Franchinus. From the perusal of these authors he entertained an opinion that the number of the modes was neither more nor less than twelve; and, confounding the ancient with the modern, or, as they are denominated, the ecclesiastical modes, which, as originally instituted by St. Ambrose, were only four in number, but were afterwards by St. Gregory, about the year 600, encreased to eight, he adopted the distinction of authentic and plagal modes, and left the subject more perplexed than he found it.

To say the truth, very few of the modern writers in the account they give of the modes are to be depended on; and among the ancients, so great is the diversity of opinions, as well with respect to the nature as the number of them, that it requires a great deal of attention to understand the designation of each, and to discriminate between the genuine and those that are spurious. In general it is to be observed that the modes answer to the species of diapason, which in nature are seven and no more, each terminating or having its final chord in a regular succession above that of the mode next preceding: for instance, the Dorian, which had its situation in the middle of the lyre or system, had for its final note hypate meson or E; the Hypolydian, the next in situation towards the grave, had for its final chord parhypate meson or F; and the Hypophrygian, the next in situation towards the grave to the Hypolydian, had for its final chord lychanos hypaton or G; so that the differences between the modes in succession, with respect to their degrees of gravity,

* Wallis. Append. pag. 212.

† Called also the Locresian. Euclid Introd. Harm. pag. 16.

corresponded with the order of the tones and semitones in the diatonic series. But it seems that those of the ancient harmonicians, who contended for a greater number of modes than seven, effected an encrease of them by making the final chord of each in succession, a semitone more acute than that of the next preceding mode: and against this practice of augmenting the modes by semitones Ptolemy has expressly written in the eleventh chapter of the second book of his *Harmonics*, and that with such force of reason and argument, as cannot fail to convince every one that reads and understands him, to which end nothing can so much conduce as the attentive perusal of that learned Appendix to his *Harmonics* of Dr. Wallis, so often cited in the course of this work.

Besides this Appendix, the world is happy in the possession of a discourse entitled, *An Explanation of the Modes or Tones in the ancient Græcian Music*, by Sir Francis Haskins Eyles Stiles, Bart., F. R. S., and published in the *Philosophical Transactions* for the year 1760; and by the assistance of these two valuable tracts it is hoped that this abstruse part of musical science may be rendered to a great degree intelligible.

CHAP. X.

To conceive aright of the nature of the modes, it must be understood, that as there are in nature three different kinds of diatessaron, and also four different kinds of diapente; and as the diapasos is composed of these two systems, it follows that there are in nature seven species of diapasos.* The difference among these several systems arises altogether from the different position of the semitone in each species. To explain this difference in the language of the ancient writers would be very difficult, as the terms used by them are not so well calculated to express the place of the semitone as those syllables invented by the moderns for that sole purpose, the practice whereof is termed solmization. We must therefore so far transgress against chronological order, as, in conformity to the practice of Dr. Wallis, to assume these syllables for the purpose of distinguishing the several species of diatessaron, diapente, and diapasos, reserving a particular account of their invention and use to its proper place.

To begin with the diatessaron; it contains four chords and three intervals: its species are also three: the first is said to be that which has LA, the characteristic ratio or sound of the diatessaron, as MI is of the diapente and diapasos, in the first or more acute place; the second which hath it in the second, and the third which hath it in the third.†

Euclid defines these several species by the appellatives that denote their situation on the lyre, viz., Βαρυπικνοὶ Barypyknoi, Μεσοπικνοὶ Mesopyknoi, and Οξύπικνοὶ Oxypyknoi,‡ meaning by the first the series from Hypaton hypaton to Hypate meson,

which we sing in ascending from the grave to the acute by the syllables FA, SOL, LA; by the second, the series from Parhypate hypaton to Parhypate meson, SOL, LA, FA; and by the third, that from Lychanos hypaton to Lychanos meson, FA, SOL, LA.§ As to the other series here under exhibited from Hypate meson to Mese, it is inserted to shew that the diatessaron is capable of but three mutations; for this latter will be found to be precisely the same as, or in truth but a bare repetition of, the first,|| as is evident in the following scales, in which the extreme or grave sound from which we ascend, is distinguished by a difference of character; the syllables being ever intended to express the intervals or ratios, and not the chords themselves.

SPECIES of the DIATESSARON III.

Mese	a	la				la
	G	sol			sol	sol
	F	fa		fa	fa	fa
Hypate meson	E	la	la	la	la	LA
	D	sol	sol	sol	sol	1
	C	fa	fa	FA	3	
Hypate hypaton	B	MI	MI	2		

1

The above is the tetrachord hypaton of the great system; but as a diapente contains five chords and four intervals, to explain the nature of the several species included in that system a greater series is required; it is therefore necessary for this purpose to make use of those two tetrachords between which the diezeugtic tone may be properly interposed; and these can be no other than the tetrachord Meson, and the tetrachord Diezeugmenon. It has been just said that the characteristic syllable of the diapente is MI, and this will be found to occur in the first, second, third, and fourth places of the following example of the possible variations in that system, the consequence whereof is, that the first species is to be sung FA, SOL, LA, MI, the second SOL, LA, MI, FA, the third LA, MI, FA, SOL, and the fourth MI, FA, SOL, LA, as in the following scales:—

SPECIES of the DIAPENTE IV.

Nete diezeugmenon	e	la				la
	d	sol			sol	sol
	c	fa		fa	fa	fa
Paramese	b	MI	MI	MI	MI	MI
Mese	a	la	la	la	la	LA
	G	sol	sol	sol	SOL	4
	F	fa	fa	FA	3	
Hypate meson	E	LA	LA	2		

1

These are all the mutations of which the diapente is capable; that an additional series, namely, that from H to f , was not inserted as a proof of it, agreeable to what was done in respect to the next preceding diagram, was because between H and f the diazeugtic tone marked by the syllable MI does not where occur: or, in other words, that series is a semidiapente or false fifth, containing only three tones, which is less by a semitone, or, to speak with

* Vide Ptolem. Harm. lib. II. cap. ix. ex vers. Wallis. Wallis. Append. de Vet. Harm. pag. 310. Euclid. Introduct. Harm. pag. 15. ex vers. Melibom. Kirch. Musurg. tom. I. cap. xv. xvi.

† Wall. Append. de Vet. Harm. pag. 310.

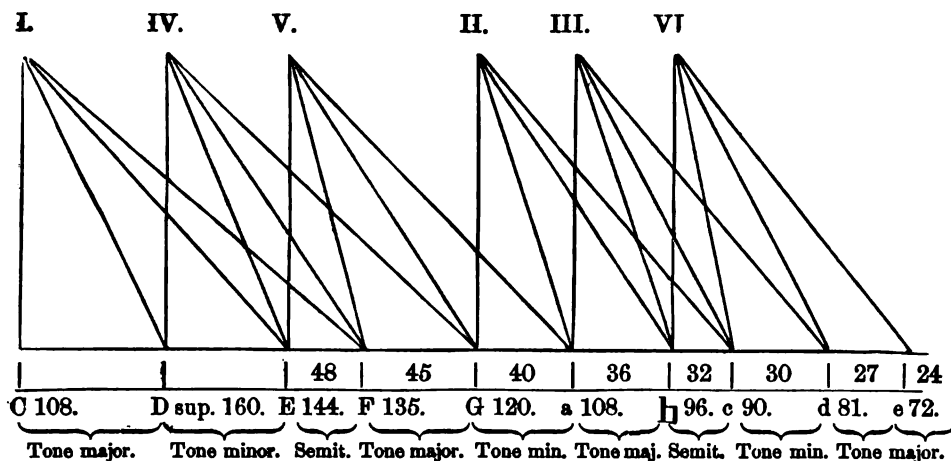
‡ Introduct. Harm. pag. 15, ex vers. Melib.

§ Wallis. Append. de Vet. Harm. pag. 310.

|| Ibid.

According to which, each of the diatessarons is made to consist of a hemitone, tone, and tone; yet out of the above six combinations, we see that these intervals do not occur twice in the same order.

Besides these, Salinas has shewn the following six other species of diatessaron; in his opinion not less true than those above exhibited:—



It seems however that he has considered that as a diatessaron, which in truth is only nominally so, namely, the Tritonus between F and H ;* the situation whereof, in respect to the others in the above diagram, seems to have suggested to him a motive for inserting from Bede an account of a very curious method of divination, formerly practised, which is here, with some small variation, translated from Salinas:—

'It is very credible that this disposition gave rise to that well-known game, the design whereof is to divine when three men placed in order have distributed among themselves three lots of different magnitudes, which of those lots each person has received; which must be done after six manners, and those the same by which the diatessaron is divided, and its intervals placed in order as we have shewn, that is to say, each lot may be twice placed in each of the three situations; for the three men answer to the three places, the first to the grave, the second to the mean, and the third to the acute; and the three lots of different magnitudes to the three intervals also of different quantity; the greater to the greater tone, the middle to the lesser tone, and the least to the semitone. This method of divination is performed by the help of twenty-four little stones, of which the diviner himself gives one to the first, two to the second, and three to the third, with this injunction, that he who has received the greatest lot, do take up out of the remaining eighteen stones as many as were at first distributed to him; he who has the lot in the middle degree of magnitude, twice as many as he has; and he that has the least lot, four times as many as he also has. By this means the diviner will be able to know from the number of stones remaining, which of the things each person has; for if the distribution be made after the first manner, there will

'be one left; if after the second two, if after the third three, if after the fourth five, if after the fifth six; and, lastly, if after the sixth seven; for there can never four remain, for which a twofold reason may be assigned; the one from the disposal of the instituent, who from the truth of the thing, though perhaps the reason thereof was not known by him, was impelled to constitute the game in this manner.

"Haud equidem sine mente reor, sine numine divum."

'The other taken from the constant and settled order of the harmonical ratio; but four cannot possibly remain, because the first and third persons having received an uneven number of stones, either of them must, if he have the greatest lot, take up an uneven number also; as by the injunction of the instituent, he was to take up as many stones as were at first distributed to him; and an uneven number being taken out of an even one, the remainder must necessarily be uneven; but as each of them may have the greatest lot twice, there must be four uneven remainders of stones out of the six changes: as to the second, he can have it only twice; because as he has an even number, and takes up a number equal thereto, there must an even number remain; for the others must also take up even numbers, as they are enjoined to take up twice, and four times as many as they had received; and the greatest lot may fall to the second person in two cases, for either the first may have the middling, and the third the smallest, and then the remainder will be two; or contrarywise, and then there will remain six; and as the greatest lot cannot come three times to the second, it is plain that the third even number, which is four, cannot by any means be left. But the other reason taken from the harmonical ratio, is much truer and stronger; for as it is shewn in the seven sounds of a diapason from C to c, that a diatessaron may be produced towards the acute from six of them, that is to say,

* Salinas De Musica, lib. IV. cap. III.

'the first, second, third, fifth, sixth, and seventh, the fourth being passed over because the diatessaron cannot be produced therefrom; so also in this play the number four is passed over as having no concern therein; but it does not happen so in the composition of instrumental harmony, for though, as is shewn in the last example above, the fourth sound from C makes a tritone, with its nominal fourth above it, it is not to be excluded from the series. Neither is the diapason from this fourth sound from C, viz., F, to be totally rejected; for though by reason of the tritone it cannot be arithmetically divided as the other six may, yet may it be divided harmonically. I should by no means have made mention of this game, being apprehensive that I may be thought to trifle on so serious an affair, but that I look upon it as an example very much suited to explain the subject we are treating of; and I did it the more willingly, because I found it particularly treated of by Bede, surnamed the Venerable, a most grave man, and deeply learned both in theology and secular arts, from whence we may conjecture that it has been invented above one thousand years.*

But, to return from this digression, notwithstanding the species of diapason are manifestly seven, the modes seem originally to have been but three in

* The passage on which this assertion is grounded, has eluded a cursory search among the writings of Bede; nevertheless it may possibly be found in some one or other of those numerous little tracts on arithmetic, music, and other of the sciences, contained in his voluminous works, many whereof as yet exist only in manuscript. The description given by Salinas of this method of division is in nearly these words:—

Ab hac etiam dispositione credendum est, ortum habuisse lusus illum notissimum, cuius propositum est, tribus hominibus ordine dispositis, tres res diversæ magnitudinis inter se distribuentibus, quam quis eorum acciperit, dividere. Quod sex modis fieri, necesse est: atque eadem, quibus diatessaron dividitur, et eodem ordine dispositis, quo tria ipsius intervalla, tribus in locis bis singula in singula ostendimus collocari. Tribus enim locis respondent tres homines: primus gravissimo, secundus medio, tertius acutissimo. Et tres res diversæ magnitudinis, tribus intervallis etiam varis quantitatibus, maxima tono maiori, media minori, minima semitono. Confectetur autem hic lusus 24 lapillis, ex quibus primo unum, secundo duos, tertio tres divinaturs ipse tradit; ea lege, ut ex 18 reliquis, qui rem maximam accipiet, tot, quot habet: qui mediam, bis totidem: qui minimam, totidem quater assumat: quo ex eorum, qui supererunt numero, quæ cuique obvenierit, possit cognoscere. Nam si primo modo fiet distributio, reliquetur unus: si fiet secundo, duo: si tertio, tres: si quatuor, quinque: si quinto, sex: et si denique sexto, septem. Neque quatuor unquam poterunt superesse, cuius duplex ratio potest assignari. Altera, ex arbitrio instituentis ab ipsa rei veritate forsitan illi non cognita ad lusus sic instituendum impulsi.

'Haud equidem sine mente reor, sine numine divum.'

Altera ex æternæ rationis harmonice dispositione desumpta. Quod autem ad instituendum attinet, quatuor id circò remanere non possunt, quoniam primus, et tertius lapillos impares suscepunt: et cum ex lege tot, quot habent, accipere teneantur, et maximam habebunt, assumunt impares: quibus ex paribus sublati, impares relinquunt necesse est, quod alterutri bis evenire continget, unde quater impares restabunt. Et cum secundus etiam bis maximam possit accipere, quoniam habet pares, totidem assumptis relinquuntur pares: nam reliquos necesse est pares assumere, cum duplicare, et quadruplicare lapillos, quos habent, teneantur. Quod bis evenire continget: aut enim primus mediam habebit, et tertius minimam, et restabunt duo: aut contra, et restabunt sex. Et cum maxima secundo ter evenire nequeat, constat, tertiam parem, qui quatuor est, nullo modo posse relinquere. Sed multo verior, et fortior est, quæ ex ratione harmonica desumitur. Nam quædammodum in septem sonis diatessaron octenus est, à sex illorum diatessaron in acutem protrahi posse, qui sunt primus, secundus, tertius, quintus, sextus, septimus: et quatuor præteriri neque in eo reperiri posse: sic etiam in lusu ipso præteritur quarta dictio, quæ octava est; quod non ita evenit in harmoniæ instrumentali compositione. Quandoquidem (ut dictum est) significat tritonum, quod à quarto sono inter septem sonos diatessaron invenitur, cum à sex aliis omnibus, diatessaron invenitur. Unde etiam in septem diapason speciebus, quæ à septem sonis dividuntur, sex arithmetice dividi possunt; una vero nequaquam, quæ à C cum prima sit, progrediendi in acutum, erit quarta. Hujus autem lusus neutiquam ego mentionem fecissem, ne in re tam seriè ludere velle viderer, nisi ad rem, quæ de agibus, facillius explicandam, aptissimum esset exemplum. Quod ex libentius feci, quoniam cum compert ex professo traditum à Bedæ cognomento Venerabili, viro gravissimo et in divinis literis, ac secularibus disciplinis eruditissimo. Unde conjectari licet, ante mille annos excogitatum fuisse. Salinas de Musica, lib. IV. cap. v.

number, namely, the Dorian, the Phrygian, and the Lydian:† the first proceeding from E to e, the second from D to d, and the third from C to c, ‡ how these are generated shall be made appear.

And first it is to be remarked that the place of the diazeutic tone is the characteristic of every mode. In the Dorian the diazeutic tone was situated in the middle of the heptachord, that is to say, it was the interval between mese or a, and paramese ♭, the chords mese and paramese being thus stationed in the middle of the system, three in the acute, namely, Tritæ diezeugmenon, Paratæ diezeugmenon, and Nete diezeugmenon; and three in the grave, namely, Lychanos meson, Parhypatæ meson, and Hypatæ meson, determined the species of diapason proper to the Dorian mode. The series of intervals that constituted the Dorian mode, had its station in the middle of the lyre, which consisted, as has been already mentioned, of fifteen chords, comprehending the system of a disdiapason; and to characterise the other modes, authors make use of a diapason with precisely the same boundaries; and that because the extreme chords, both in remission and intention, are less grateful to the ear than the intermediate ones. Ptolemy takes notice of this, saying, that the ear is delighted to exercise itself in the middle melodies: § and he therefore advises, for the investigation of the modes, the taking the diapason as nearly as may be from the middle of the lyre.||

The Dorian mese being thus settled at a, and the position of the diazeutic tone thereby determined, a method is suggested for discovering the constitution of the other six modes, namely, the Mixolydian, Lydian, Phrygian, Hypolydian, Hypophrygian, and Hypodorian, making together with the Dorian, seven, and answering to the species of the diapason; all above which number, according to the express declaration of Ptolemy, are to be rejected as spurious.¶¶

But in order to render this constitution intelligible, it is necessary to take notice of a distinction made by Ptolemy, lib. II. cap. xi. between the natural, or, which is the same, the Dorian Mese and the modal Mese; as also between every chord in the lyre or great system, and its corresponding sound in each of the modes, which he has noted by the use of the two different terms Positions and Powers. In the Dorian mode these coincided, as for example, the Mese of the lyre, that is to say the Mese in position, was also the Mese in power, the Proslambanomenos in position was also the Proslambanomenos in power, and so of the rest.**

But in the other modes the case was far otherwise; to instance, in the Phrygian, there the Mese in position was the Lychanos meson in Power, and the Proslambanomenos in position the Paratæ hyperboleon in power. In the Lydian the Mese in position

† Ptolem. Harm. lib. II. cap. vi. Wallis Append. de Vet. Harm. p. 312.

‡ Vide Kirch. Musurg. tom. I. cap. xvi.

§ Harmonicor. lib. II. cap. xi.

¶ Ibid. lib. II. cap. xi.

|| Lib. II. cap. viii. ix. xi. ex. vers. Wallis.

** Vide Sir Francis Stiles on the Modes, pag. 702.

By the Mese in power is to be understood not the actual Mese or the middle chord of the septenary, but that which marks the position of the diazeutic tone which varies in each mode. In the Dorian, for instance, it holds the middle or fourth, in the Phrygian the third, and in the Lydian the second place, reckoning from the acute towards the grave. See the diagram of the species of diapason in the seven Ptolemaic modes hereafter inserted.

was the Parhypate meson in power, and the Proslambanomenos in position was the Tritē hyperboleon in power; and to the rule for transposition of the Mese the other intervals were in like manner subject.

From this distinction between the real, and the nominal or potential Mese, followed, as above is noted, a change in the name of every other chord on the lyre, which change was regulated by that relation which the several chords in each mode bore to their respective Meses, and the term Mese not implying any thing like what we call the Pitch of the sound, but only the place of the diazeutic tone in the lyre, this change of the name became not only proper, but absolutely necessary: nor is it any thing more than is practised at this day, when by the introduction of a new cliff, we give a new name, not only to One, but a series of sounds, without disturbing the order of succession, or assigning to them other powers than nature has established.

The following scale taken from the notes of Dr. Wallis on the eleventh chapter of the second book of the Harmonics of Ptolemy, exhibits the position on the lyre, of each of the modal Meses:—

aa	Nete hyperboleon	
g	Paranete hyperboleon	
f	Trite hyperboleon	
e	Nete diezeugmenon	
d	Paranete diezeugmenon	Mixolydian
c	Trite diezeugmenon	Lydian
b	Paramese	Phrygian
a	Mese	Dorian
G	Lychanos meson	Hypolydian
F	Parhypate meson	Hypophrygian
E	Hypate meson	Hypodorian
D	Lychanos hypaton	
C	Parhypate hypaton	
B	Hypate hypaton	
A	Proslambanomenos*	

MESE

intervals of the diapason above and below it, follow of course as they arise in the order of nature; and we are enabled to say not only that the species of diapason answering to the several modes in their order are as follow:—

Mixolydian	}	from	B to b
Lydian			C to c
Phrygian			D to d
Dorian			E to e
Hypolydian			F to f
Hypophrygian			G to g
Hypodorian			A to a, or a to aa†

But that the following is the order in which the tones and semitones occur in each series, proceeding from grave to acute:—

Mixolydian—Semitone, tone, tone, semitone, tone, tone, tone.

Lydian—Tone, tone, semitone, tone, tone, tone, semitone.

Phrygian—Tone, semitone, tone, tone, tone, semitone, tone.

Dorian—Semitone, tone, tone, tone, semitone, tone, tone.

Hypolydian—Tone, tone, tone, semitone, tone, tone, semitone.

Hypophrygian—Tone, tone, semitone, tone, tone, semitone, tone.

Hypodorian—Tone, semitone, tone, tone, semitone, tone, tone.‡

And this, according to Ptolemy, is the constitution of the seven modes of the ancients.

† Sir F. S. on the Modes, 708. Kirch. Musurg. tom. I. cap. xvi.

‡ Upon the constitution of the first of the above modes a great difficulty arises, namely, how to reconcile it to the rules of harmonical progression, for it is expressly said by Kircher and also by Sir Francis Stiles, in his Discourse on the Modes, pag. 407, and may be inferred from what Ptolemy says concerning them in his Harmonics, lib. II. cap. x. that the Mixolydian answers to the species of diapason from Hypate hypaton to Paramese, that is to say, from \flat to \flat , and that the semitones in it are the first and fourth intervals in that series; now if this be the case, as most clearly it is, the interval between the chord \flat and the chord Parhypate meson or F, must be a semidiapente, which is a false relation, arising from two inconcinnous chords, and consequently is unfit for musical practice.

Again, in the Hypolydian, from Parhypate meson to Tritē hyperboleon, or F to \sharp , a tritone occurs between F and \sharp , which is a false relation, and renders this species equally with the former unfit for musical practice.

Dr. Wallis seems to have been aware of this difficulty, and has attempted to solve it in a diagram of his, containing a comparative view of the ancient modes with the several keys of the moderns, by prefixing the flat sign \flat , to Hypate hypaton; agreeable to what he says in another place, that in the Mixolydian \sharp is placed in E \flat \sharp , and to get rid of the tritone in the latter case he prefixes a second flat in E \flat \sharp \flat , excluding thereby \sharp from thence, and placing it in A \flat \sharp \flat .

Sir Francis Stiles has done the same, and farther both these writers have made use of the acute sign \sharp for similar purposes. In all which instances it is supposed they are justified by the practice of the ancients; for it is to be noted that they had a particular tuning for every key, which could be for no other purpose than that of dislocating the intervals from their respective stations in the several species of diapason, and might probably reduce them to that arrangement observable in the keys of the moderns, which, after all that can be said about them, are finally resolvable into two.

* Ptolem. Harmonic. ex vers. Wallis, pag. 187, in not.

† Sir Francis Stiles on the Modes, pag. 709. And see the diagram of the seven Ptolemaic modes hereinafter inserted.

BOOK II.

CHAP. XI.

In the foregoing enquiry touching the modes, endeavours have been used to demonstrate the coincidence between the seven genuine modes and the seven species of diapason. But supposing the relation between them to be made out, a question yet

remains, namely, whether the progression in each of the modes was in the order prescribed by nature or not. In what order of succession the tones and semitones arise in each species of the diapason has already been declared; and it seems from the repre-

resentation above given of the species, that as the keys of the moderns are ultimately reducible to two, DO MI, and RE FA, so the seven modes of the ancients by the dislocation of the Mese for each, and that consequent new tuning of the diapason for each, which is mentioned by Ptolemy in the eleventh chapter of his second book, are by such dislocation of the Mese and a new tuning reduced to two. To this purpose Dr. Wallis seems uniformly to express himself, and particularly in this his description of the modes taken from Ptolemy:—

‘Ptolemy, in the eleventh chapter of his second book, and elsewhere, makes the Dorian the first of the modes, which, as having for its Mese and Paramese the Mese and Paramese both in position and power, or, to speak with the moderns, having its *mi* in *H*, may be said to be situated in the midst of them all; he therefore constitutes the Dorian mode so as that between the real and assumed names of all the chords, there is throughout a perfect coincidence: and to this mode answers that key of the moderns in which no signature is placed at the head of the stave to denote either flat or sharp.

‘Secondly he takes a mode more acute than the former by a diatessaron, which therefore has for its Mese a chord also more acute by a diatessaron, namely the Paraneie diezeugmenon of the Dorian, and consequently its Paramese, which is our *mi*, must answer to the Nete diezeugmenon, that is as we speak, *mi* is placed in E *la mi*, and this he calls the Mixolydian. The moderns for a similar purpose place a flat on B *fa*, and thereby exclude *mi*.

‘And from hence he elsewhere, lib. II. cap. vi. concludes, that there is no necessity for that which the ancients called the conjunct system, namely, the system from Proslambanomenos to Nete synemmenon, since that is sufficiently supplied by the change made in Mese from the Dorian to the Mixolydian mode; for here follows after the two conjunct tetrachords in the Dorian, from Hypate hypaton to the Mese, that is from B *mi* to A *la mi re*, a third in the Mixolydian from its Hypate Meson, which is the Mese in the Dorian to its Mese, that is from A *la mi re* to D *la sol re*; so that there are three conjunct tetrachords from B *mi*, the Hypate hypaton of the Dorian, to D *la sol re*, the Mese of the Mixolydian.

‘Thirdly, as another diatessaron above that in the acute, could not be taken without exceeding that diapason in the midst whereof the Mese of the Dorian was placed, Ptolemy assumes in the room thereof a diapente towards the grave, which may answer to a diatessaron taken towards the acute, in as much as the sounds so taken, differing from each other by a diapason, may in a manner be accounted the same. The Mese therefore of this new mode must be graver by a diapente than that of the Mixolydian; that is to say, it is the Lychanos hypaton of the Mixolydian, or, which is the same, the Lychanos meson of the Dorian, and consequently its Paramese will be the Mese of the Dorian; that is as we should say, *mi* in A *la mi re*. This is what Ptolemy calls the Hypolydian mode, to denote

‘which we put besides the flat placed before in B *fa* b *mi*, a second flat in E *la mi*, to exclude *mi* from thence, and thereby *mi* is removed into A *la mi re*.

‘Fourthly, as he could not from hence towards the grave, take either a diapente or diatessaron, without going beyond the above diapason, Ptolemy takes a mode more acute than the Hypolydian by a diatessaron, which he calls the Lydian, the Mese whereof is the Paraneie diezeugmenon, and its Paramese the Nete diezeugmenon of the Hypolydian; which latter is also the Paraneie diezeugmenon of the Dorian, that is as we speak, *mi* in D *la sol re*. We, to denote this mode, besides the two flats already set in b and e, put a third in A *la mi re*, whereby we exclude *mi* from thence, and transfer it to D *la sol re*.

‘Fifthly, as the Mixolydian was taken from the Dorian, and made a diatessaron more acute, so is the Hypodorian to be taken from the same Dorian towards the grave, and made more grave than that by a diatessaron: the Mese therefore of the Hypodorian is the Hypate meson of the Dorian; and its Paramese, which is our *mi*, is the Parhypate meson of the Dorian, that is as we speak, *mi* in F *fa ut*. We, to denote this mode, leaving out all the flats, place an acute signature or sharp in F *fa ut*, which would otherwise be elevated by a hemitone only, and called *fa*, but it is now called *mi*, and elevated by a whole tone above the next note under it; by reason whereof the next note in the acute will be distant only a hemitone from that next under it, and be called *fa*, and *mi* will return in a perfect diapason in the F *fa ut* next above it.

‘Sixthly, as another diatessaron towards the grave cannot be assumed from the Hypodorian thus situated, without exceeding the limits of the above diapason, he takes the Phrygian mode a diapente more acute, which is the same thing in effect, since between any series in the fifth above and in the fourth below, the distance is precisely a diapason; the Mese therefore of this mode is the Nete diezeugmenon of the Hypodorian, that is the Paramese of the Dorian, and consequently its Paramese is the Trita diezeugmenon of the Dorian, that is as we speak, *mi* in c *fa ut*; to denote which, besides the sharp placed before in F *fa ut*, we put another sharp in C *fa ut*, which would otherwise be elevated by only an hemitone above the next note under it, but is now elevated by a whole tone; and as before it would have been called *fa*, it must now be called *mi*; and from hence to g *sol re ut* is now only a hemitone, which is therefore to be called *fa*, *mi* returning either in cc *sol fa* above, or in c *fa ut* below.

‘Seventhly and lastly, the Hypophrygian is taken from the Phrygian, as above defined, and is distant therefrom by a diatessaron towards the grave. Its Mese therefore is the Hypate meson of the Phrygian, that is to say the Parhypate meson of the Dorian, consequently its Paramese, which is our *mi*, is the Lychanos meson of the Dorian. That is as we speak, *mi* in G *sol re ut*, to express which, the rest standing as above, we place a third sharp in G *sol*

'*re ut*, which otherwise, by reason that *F fa ut* was made sharp before, would be elevated by only a hemitone, and called *fa*, is now elevated by a whole tone and called *mi*, and therefore *A la mi re*, distant from *G sol re ut* by a hemitone, is called *fa*, and *mi* returns in *g sol re ut* above, or in *F ut* below.

'The modes being thus determined, we gather from thence that the Mixolydian mode is distant from the Lydian as in Ptolemy, lib. II. cap. x. by a limma, or not to speak so nicely, by a hemitone, the Lydian from the Phrygian by a tone, the Phrygian from the Dorian by a tone, the Dorian from the Hypolydian by a limma, the Hypolydian from the Hypophrygian by a tone, and the Hypophrygian from the Hypodorian also by a tone.

'From these premises Ptolemy concludes, not only that the seven modes above enumerated are all that are necessary, but even that there is not in nature room for any more, by reason that all the chords in the diapasen are by this disposition occupied: for since all the chords, from the Hypate meson to the Paranete diezeugmenon inclusively, are the Mese of some mode, there is no one of them remaining to be made the mese of any intermediate mode: for example, the Mese in power of the Hypodorian is in position the Hypate meson, and the Mese in power of the Hypophrygian is the Parhypate meson; and as there is no chord lying between these two there is none left, nor can be found to be the Mese of any intermediate mode, or which, as Aristoxenus supposes, may with propriety be called the graver Hypophrygian or Hypoastian; and what has been said of the Mese may with equal reason be said of the Paramese, which is our *mi*.*

Thus far Dr. Wallis, who has undoubtedly delivered, though in very concise terms, the sense of his author; nevertheless as the whole of the arguments for restraining the number of modes to seven is contained in the eleventh chapter of the second book of Ptolemy, and Sir Francis Stiles has bestowed his pains in an English version thereof, it may not be amiss to give it as translated by him, and his words are as follow:—

'Now these being the modes which we have established, it is plain, that a certain sound of the diapasen is appropriated to the Mese in power, of each, by reason of their being equal in number to the species. For a diapasen being selected out of the middle parts of the perfect system, that is the parts from Hypate meson in position to Nete diezeugmenon, because the voice is most pleased to be exercised about the middle melodies, seldom running to the extremes, because of the difficulty and constraint in immoderate intensions, and remissions, the Mese in power of the Mixolydian will be fitted to the place of Paranete diezeugmenon, that the tone may in this diapasen make the first species; that of the Lydian, to the place of Trite diezeugmenon, according to the second species; that of the Phrygian, to the place of Paramese, according to the third species; that of the Dorian, to the place of the Mese, making the fourth and

'middle species of the diapasen; that of the Hypolydian, to the place of Lychanos meson, according to the fifth species; that of the Hypophrygian, to the place of Parhypate meson, according to the sixth species; and that of the Hypodorian, to the place of Hypate meson, according to the seventh species; that so it may be possible in the alterations required for the modes, to keep some of the sounds of the system unmoved, for preserving the magnitude of the voice, meaning the pitch of the diapasen; it being impossible for the same powers, in different modes to fall upon the places of the same sounds. But should we admit more modes than these, as they do who augment their excesses by hemitones, the Meses of two modes must of necessity be applied to the place of one sound; so that in INTERCHANGING THE TUNINGS of those two modes, the whole system in each must be removed, not preserving any one of the preceding tensions in common, by which to regulate the proper pitch of the voice. For the Mese in power of the Hypodorian for instance, being fixed to Hypate meson by position, and that of the Hypophrygian to Parhypate meson, the mode taken between these two, and called by them the graver Hypophrygian, to distinguish it from the other acuter one, must have its Mese either in Hypate, as the Hypodorian, or in Parhypate, as the acuter Hypophrygian; which being the case, when we interchange the tuning of two such modes, which use one common sound, this sound is indeed altered an hemitone in pitch by intension or remission; but having the same power in each of the modes, viz., that of the Mese, all the rest of the sounds are intended or remitted in like manner, for the sake of preserving the ratios to the Mese, the same with those taken before the mutation, according to the genus common to both modes; so that this mode is not to be held different in species from the former, but the Hypodorian again, or the same Hypophrygian, only somewhat acuter or graver in pitch, that these seven modes therefore are sufficient, and such as the ratios require, be it thus far declared.†

Dr. Wallis continues his argument, and with a degree of perspicuity that leaves no room to doubt but that he is right in his opinion, shows that the modes of the ancients were no other than the seven species of diapasen: for, as a consequence of what he had before laid down, he asserts that the syllable *mi*, to speak, as he says, with the moderns, has occupied all the chords by the modes now determined, since in the Hypodorian, *mi* is found in *F*, and also in *f*, which is a diapasen distant therefrom. In the Hypophrygian it is found in *G*, and therefore also in *F* and in *g*, which are each a diapasen distant therefrom. In the Hypolydian it is found in *a*, and therefore in *A* and *aa*, each distant a diapasen therefrom. In the Dorian it is found in *b*, and therefrom in *b* and *bb*. In the Phrygian *mi* is found in *c*, and also in *C* and *cc*. In the Lydian it is found in *d*, and therefore in *D* and *dd*. And lastly, in the Mixolydian it is found in *e*, and con-

* Wallis Append. de Vet. Harmon. pag. 314, et seq.

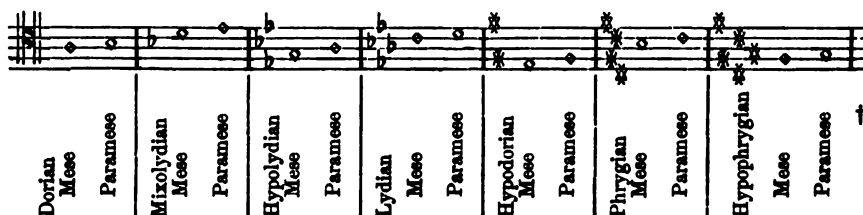
† Sir F. S. on the Modes, pag. 724.

sequently in E and ee; from all which it is evident that there can no one chord remain whereon to place *mi* for any other mode, which would not coincide with some one of these above specified.*

Nothing need be added to illustrate this account of the modes but an observation, that instead of g and c for the respective places of *mi* in the Hypo-

phrygian and Phrygian modes, their true positions will be found to be in g \sharp and c \sharp and their replicates.

The following scheme is exhibited by Dr. Wallis to show the correspondence between the several keys as they arise in the modern system, and the modes of the ancients :—



By which it should seem that the key of A with the lesser third answers to the Dorian; D with the lesser third to the Mixolydian; G with the lesser third to the Hypolydian; C with the lesser third to the Lydian; E with the lesser third to the Hypodorian; B with the lesser third to the Phrygian, and F \sharp with the lesser third to the Hypophrygian.

These are the sentiments of those who taught that the modes were coincident with the species of diapason. Another opinion however prevailed, namely, that the word Mode or tone signified not so properly any determinate Succession of sounds, as the Place of a sound; and indeed this is one of the definitions given by Euclid of the word Tone or Mode;† or, in other words, the difference between one tone and another consisted in the Tension, or, as we should say, the Pitch of the system.§ The occasion of this diversity of opinion seems to be this, Aristoxenus, the father of that sect which rejected the measure by ratios, and computed it by intervals, in his treatise on Harmonics, book the second, divides the science into seven parts, 1. Of sounds 2. Of intervals 3. Of genera. 4. Of systems. 5. Of tones. 6. of mutations. 7. of melopoeia.|| Now had he considered the species of diapason to have been the same as, or even connected with, the modes, it had been natural for him to have placed them under the fifth division, that is to say, of tones, or at least under the sixth, of mutations. instead of which we find them ranged under the fourth, namely, that of systems; and even there it is not expressly said, though from their denominations, and other circumstances it might well be inferred, that the species of diapason had a relation to the modes.¶ The silence of Aristoxenus, and indeed of all his followers, in this respect, has created a difficulty in admitting a connexion between the species of diapason and the modes, and has led some to suspect that they were distinct; though after all that can be said, if the modes were not the same with the species, it is extremely hard to conceive what they could be; for a definition of a mode, according to the Aristoxeneans,

does by no means answer to the effects ascribed by the ancient writers, such as Plutarch and others, to the modes; for instance, can it be said of the Dorian that it was grave and solemn, or of the Phrygian that it was warlike, or that the Lydian was soft and effeminate, when the difference between them consisted only in a different degree of intension or remission; or, in other words, a difference in respect of their acumen or gravity? On the other hand, the keys of the moderns, which, as already has been shewn, answer to the modes of the ancients, have each their characteristic, arising from the different measures of their component intervals; those with the minor third are all calculated to excite the mournful affections; and yet amongst these a difference is easily noted: the funereal melancholy of that of F is very distinguishable from the cloying sweetness of that of A; between those with the greater third a diversity is also apparent, for neither is the martial ardour of the key D at all allied to the hilarity that distinguishes the key E, nor the plaintive softness of E b to the masculine energy of B b, but surely no such diversity could exist, if the sole difference among them lay in the Pitch, without regard to their component intervals.

This difficulty, whether greater or less, seems however to be now removed by the industry and ingenuity of the above-named Sir Francis Stiles, who in the discourse so often above-cited, namely, his Explanation of the Modes or Tones in the ancient Græcian Music, has reconciled the two doctrines, and suggested a method for demonstrating that to adjust the pitch of any given mode is also to adjust the succession of its intervals, the consequence whereof is a discovery that the two doctrines, though seemingly repugnant, are in reality one and the same. The reasonings of this very able and accurate writer are so very close and scientific, that it is not easy to deliver his sense in other terms than his own; however it may not be amiss to give a short statement of his arguments.

The two doctrines which he has undertaken thus to reconcile, he distinguishes by the epithets of Harmonic and Musical; the former of these, which he says had the Aristoxeneans for its friends, taught that the difference between one mode and another,

* Append. de Vet. Harm. 315.

† Ptolem. Harmonic. ex vers. Wallis, pag. 137, in not.

‡ Introd. Harm. pag. 19, ex vers. Meibom.

§ Sir Francis Stiles on the Modes, pag. 698.

|| Lib. II. pag. xxxv. et seq. ex vers. Meibom.

¶ Vide Sir Francis Stiles on the Modes, pag. 704.

lay in the tension or pitch of the system; the latter, and which Ptolemy with great force of reasoning contends for, teaches that this difference consisted in the manner of dividing an octave, or, as the ancients express it, in the different species of diapason: the task which this writer has undertaken is, to shew that between these two definitions of a musical mode there is a perfect agreement and coincidence.

In order to demonstrate this he shews, pag. 701, from Bacchius, pag. 12, edit. Meibom. that the Mixolydian mode was the most acute, the Lydian graver by a hemitone, the Phrygian graver than the Lydian by a tone, the Dorian graver than the Phrygian by a tone, the Hypolydian graver than the Dorian by a hemitone, the Hypophrygian graver than the Hypolydian by a tone, and the Hypodorian graver than the Hypophrygian by a tone.* He adds, 'that as the Guidonian scale answers to the system of the ancients in its natural situation, which was in the Dorian mode, and our *A la mi re* consequently answers to the pitch of the Dorian Mese, we have a plain direction for finding the absolute pitch of the Meses for all the seven in our modern notes, and they will be found to stand thus:—

Mixolydian Mese in	-	-	d
Lydian in	-	-	c \sharp
Phrygian in	-	-	b
Dorian in	-	-	a
Hypolydian in	-	-	g \sharp
Hypophrygian in	-	-	f \sharp
Hypodorian in	-	-	e \sharp

But to understand this doctrine as delivered by the ancients, the same author says it will be necessary to examine how the Meses of the seven modes were stationed upon the lyre; and in order to that, to consider the structure of the instrument; this he explains in the following words:—The lyre, after its last enlargement, consisted of fifteen strings, which took in the compass of a diadiapason or double octave; these strings were called by the same names as the fifteen sounds of the system, and when tuned for the Dorian mode corresponded exactly with them. Indeed there can be no doubt but that the theory of the system had been originally drawn from the practice of the lyre in this mode, which was the favourite one of the Greeks, as the lyre was also their favourite instrument. In this mode then the Mese of the system was placed in the Mese of the lyre, but in every one of the rest it was applied to a different string, and every sound in the system transposed accordingly. Hence arose the distinction between a sound in Power and a sound in Position; for when the system was transposed from the Dorian to any other mode, suppose for instance the Phrygian, the Mese of the lyre, though still Mese in position, acquired in this case the power of the Lychanos meson; and the

'Paramese of the lyre, though still Paramese in position, acquired the power of the Mese. In these transpositions, one or more of the strings always required *new tunings*, to preserve the relations of the system; but notwithstanding this alteration of their pitch they retained their old names when spoken of, in respect to their positions only; for the name implied not any particular pitch of the string, but only its place upon the lyre in the numerical order, reckoning the Proslambanomenos for the first.†

These are the sentiments of the above-cited author, with respect to the Harmonic doctrine: the Musical has been already explained; or if any thing should be wanting, the scale hereinafter inserted, shewing the position of the Mese, and the succession of chords in each of the modes in a comparative position with those in the natural system, will render it sufficiently intelligible.

CHAP. XII.

It now remains to shew the method by which this author proposes to reconcile the two doctrines. He says that by the Harmonic doctrine we are told the pitch of the system for each mode; and by the Musical, in what part of the system to take the species of diapason, and that by combining the two directions we gain the following plain canon for finding any mode required:—§

C A N O N.

'First pitch the system for the mode, as directed by the harmonic doctrine; then select from it the diapason, directed by the musical; and we have the characteristic species of the mode in its true pitch.'||

To make this more plainly appear, he has annexed a diagram of the species of diapason, which is here also exhibited, and which he says will shew at what pitch of the Guidonian scale each sound of the diapason is brought out by the canon for each of the seven modes; and that as in the construction of this diagram the directions of the canon have been strictly pursued, so it will appear that the result of it is in all respects conformable to the principles of both doctrines. 'Thus,' continues he, 'in the Dorian, for instance, it will be seen that the Mese is placed in *A la mi re*, and that the rest of the sounds exhibited in that diapason, are placed at the proper distances, for preserving the order of the system as required by the harmonic doctrine. It will also be seen that the diapason selected lies between Hypate meson and Nete diezeugmenon; that the semitones are the first interval in the grave, and third in the acute; and that the Diazeugtic tone is in the fourth interval, reckoning from the acute. All which circumstances were also required by the musical doctrine for this mode; and in the rest of the modes all the circumstances required by each doctrine will in like manner be found to obtain: So that no objection

* Sir F. S. on the Modes, 701.

† Ibid. Dr. Wallis, in his edition of Ptolemy, pag. 137, assigns c, g, and f natural, for the positions of the Lydian, Hypolydian, and Hypophrygian Mese; but Sir Francis Stiles, for reasons mentioned in his discourse, pag. 703, places them in c \sharp , g \sharp , and f \sharp .

‡ Sir Francis Stiles on the Modes, pag. 702.

§ Ibid, 710. || Ibid.

'can well be raised to the principles on which the diagram has been framed, by the favourers of either doctrine separately: and the very coincidence of the two doctrines therein might furnish a probable

'argument in justification of the manner in which I have combined them in the canon.' *

Here follows the diagram of the seven species of diapason above-mentioned:—

* Ibid. 711.

SPECIES OF THE DIAPASON IN THE SEVEN MODES ADMITTED BY PTOLEMY.

HYPODORIAN.

Nete hyperb.	Paran. Hyperb.	Trite hyperb.	Nete diez.	Paran. diez.	Trite diez.	Parameo	Dias. tone	Mese
e	d	c	b	a	g	f [#]	e	e

HYPOPHRYGIAN.

Paran. hyperb.	Trite hyperb.	Nete diez.	Paran. diez.	Trite diez.	Parameo	Dias. tone	Mese	Lich. mese
e	d	c [#]	b	a	g	f [#]	e	e

HYPOLYDIAN.

Trite hyperb.	Nete diez.	Paranete diez.	Trite diez.	Parameo	Dias. tone	Mese	Lich. mea.	Parhyp. mea.
e	d [#]	c [#]	b	a [#]	g [#]	f [#]	e	e

DORIAN.

Nete diez.	Paranete diez.	Trite diez.	Parameo	Dias. tone	Mese	Lich. mea.	Parhyp. mea.	Hyp. mea.
e	d	c	b	a	g	f [#]	e	e

PHRYGIAN.

Paranete diez.	Trite diez.	Parameo	Dias. tone	Mese	Lich. mesop.	Parhyp. mea.	Hyp. meson	Lich. hyp.
e	d	c [#]	b	a	g	f [#]	e	e

LYDIAN.

Trite diez.	Parameo	Dias. tone	Mese.	Lich. meson	Parhyp. meson	Hypat. meson	Lich. meson	Parhyp. hyp.
e	d [#]	c [#]	b	a	g [#]	f [#]	e	e

MIXOLYDIAN.

Parameo	Dias. tone	Mese	Lich. meson	Parhyp. meson	Hypat. meson	Lich. hypaton.	Parhyp. hyp.	Hypat. hyp.
e	d	c	b ^b	a	g	f	e	e

By the help of the above diagram it is no very difficult matter to ascertain, beyond the possibility of doubt, the situations of the different modes with respect to each other; or, in other words, to demonstrate that six of them were but so many trans-

positions from the Dorian, which occupies the middle station: whether after such transposition the intervals remained the same or not, is a subject of dispute.

With regard to this question it may be observed, that throughout the whole of Ptolemy's treatise,

nothing is to be met with that leads to a comparison between the modes of the ancients and the keys of the moderns; for it seems that with the former the characteristic of each mode was the position of the diazeugtic tone, and the consequent arrangement of the tones and semitones corresponding with the several species of diapason, to which they respectively answer. But the keys of the moderns are distinguished by the final chord, and therefore unless they could be placed in a state of opposition to each other, it is very difficult to demonstrate that this or that key answers to this or that of the ancient modes, or unless a several tuning of the lyre for each mode be supposed, to ascertain the constituent intervals of the latter. Sir Francis Stiles seems to have been aware of this difficulty, for though in page 708 of his discourse, he has given a diagram in which the Mixolydian mode is made to answer to the series from \mathbf{H} to \mathbf{h} , and the others in succession, to the succeeding species, he means nothing more by this than to compare them severally with a species of diapason selected from the middle of the lyre, without regard to the fundamental chord or key-note.

Neither does the diagram of the seven species of diapason, given by him and above inserted, afford any intelligence of this kind; and but for a hint that he has dropped at the close of his discourse, that the Hypodorian answers exactly to our *A mi la*, with a minor third, and the Lydian to our *A mi la*, with a major third,* we should be totally at a loss with respect to his sentiments touching the affinity between the ancient modes and the modern keys.

That there was some such affinity between the one and the other is beyond a doubt; † and we see Dr. Wallis's opinion of the matter in the diagram above inserted from his notes on the eleventh chapter, lib. II. of his author, containing a comparative view of the keys with the modes. And though it is to be

* The anonymous author of a Letter to Mr. Avison, who by the way was the late reverend and learned Dr. Jortin, had in that letter blamed Sanadon and Cerceau for affirming, in their Observations on Horace, that the Dorian mode answered exactly to our *A mi la* with a minor third, and the Phrygian to our *A mi la* with a major third: from hence Sir Francis Stiles takes occasion to give the above as his opinion of the matter. In which, after all, it seems that he is mistaken, and that the author of the letter was in the right: his words are these, and they are well worth noting:—

‘Sanadon and Cerceau in their observations on Horace, Carm. v. 9.

‘Sonante mixtum tibia carmen lyra,

‘Hac Dorian, illis barbarum.

‘affirm that the Modus Dorian answered exactly to our *A mi la* with a minor third, and the Modus Phrygius to our *A mi la* with a major third: but surely this is a musical error, and a dream from the ivory gate. Two modes, with the same tonic note, the one neither acuter nor graver than the other, make no part of the old system of modes.’

This is very true; and the reason of Sir Francis Stiles for asserting the contrary was that he had deceived himself into a different opinion by placing the acute signs to *f* and *g* in the Lydian, thereby giving to that series the appearance of the key of *A*. But upon his own principles the Lydian answers to our key of *C fa* with the major third,

Tone, tone, semitone, tone, tone, semitone
DO RE MI FA SOL LA SI

For though the acute signs require that the final chord be *A*, the succession of intervals is that proper to the diapason *C*.

† Sethus Calvisius seems to have been of this opinion in the following passage cited by Butler in his Principles of Music, pag 86. in not:—‘In hoc choral cantu, diligentissime consideret hule Arti deditus, qui sint ‘ubique; Modulationis progressus, quod Exordium, et quis Finit: ut ‘cognoscat ad quem modum referatur. Inde enim tam primum illius ‘Modi clausulam, quam Secundariam, erueret, et convenientibus locis ‘annotaret, et inserere poterit.’ Calvis. c. 17, and Butler himself adds that this is the general sentiment of musicians. Notwithstanding that Cælius Rhodogianus out of Casiodorus distinguishes the modes by their several effects. Ibid.

feared that there is not that precise agreement between them which he has stated, there is good ground to suppose that, as in the keys, the succession of intervals is in the order which the sense approves, so the succession in the modes could not but have been in some degree also grateful to the ear.

This supposition is founded on a passage in the eleventh chapter of the second book of Ptolemy, importing no less than that each of the modes required a peculiar tuning, and these tunings have been severally investigated, and are given by Sir Francis Stiles; for what purpose, then, it may be asked, but to render the intervals grateful to the sense, was a new tuning of the lyre for every mode necessary; and what could that terminate in, but two constitutions, in the one whereof the interval between the fundamental chord and its third was a semitone, and in the other a ditone; and when the lyre was so tuned, what became of the seven species of diapason? The answer to this latter demand is, that as there seem to be in nature but the two species above mentioned, proceeding, as will presently be shewn, from *A* and *C* respectively, the remaining five were rejected, and considered as subjects of mere speculation.

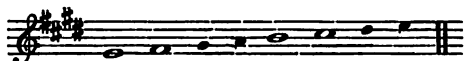
But before we proceed to refute the opinion of those who without knowing, or even suspecting, that the tuning of the lyre was different in each mode, contend, that there are in nature seven, not merely nominal, but real modes, it is but just to state the reasons on which it is founded.

And first it is said on the authority of those ancient writers who define a mode to be a given species of diapason, that as there are in nature seven such species, so are there seven modes, in each whereof the succession of tones and semitones must be in that order which nature has established, or as they arise in the scale, without interposing any of those signatures to denote remission or intension, which are used for that purpose by the moderns. They say farther that none of the species were at any time rejected by the ancients as unfit for practice; and from thence take occasion to lament the depravity of the modern system, which admits of no other diversity of modes or keys than what arises from the difference between the major and the minor third; for, say they, and they say truly, the modern system admits in fact of but two, namely *A* and *C*; the first the prototype of the flat, as the latter is of the sharp keys, all the rest being respectively resolvable into one or the other of these.‡

‡ In the Dissertation sur le Chant Gregorien of Monsieur Nivers, Paris 1688, chap. xii. it is said that the eight ecclesiastical tones, which all men know have their foundation in the ancient modes, are reducible to four, and in strictness to two, as being no otherwise essentially distinguished than by the greater and lesser third; and the same may be inferred from a well-known discourse, entitled a Treatise on Harmony, containing the chief rules for composing in two, three, and four parts, which though at first printed in 1730 by one of his disciples, was indisputably the work of Dr. Pepusch, and was afterwards published by him with additions, and examples in notes. In this tract is a chapter on transposition, in which the reader is referred to a plate at the end of the work, containing a table of the keys, with their characteristics, and a stave of musical lines, with certain letters inscribed thereon, which, for the purpose of resolving any transposed or fictitious key into its natural tone by the annihilation of the flat or sharp signatures, he is directed to cut off and apply to the above-mentioned table, by means whereof it may be discovered that all the flat keys are transpositions from that of *A*, and all the sharp from that of *C*. This is a process so merely mechanical, that no one can be the wiser for having performed it, and

But what, if after all, the ear will not recognise any other succession of intervals than is found in the constitution of the keys A and C? The consequence

is rather calculated to disguise than explain the true method of reducing a transposition to its natural key. But in a small tract, entitled, *Elements ou Principes de Musique mis dans un nouvel Ordre*, par M. Loulie, printed at Amsterdam, in 1698, we meet with a notable rule or canon for this purpose, which fully answers the design of its invention. This author premises that the dièses, or what we should call the sharps, placed at the beginning of the musical stave, arise by fifths, beginning from F, that is to say, C G D A E, and that the B mols or flats arise by fourths, beginning from B in this order, E A D G C. The rule or canon which he deduces from hence is this: In keys which are determined by sharp signatures, call the last sharp *si*; or as any but a Frenchman would say *mi*, and place or suppose such a cliff at the head of the stave as in a regular course of solmisation, will make it so. To give an instance of the key of E with the major third:—



Here the attentive peruser will observe that the interval between the third and fourth, and also between the seventh and eighth notes, is a semitone; and that to make the last sharp D, *mi*, the tenor cliff must be placed on the first line of the stave, and when this is done as here it is—



the progression of tones and semitones will be exactly in the same order as in the key of C, from which this of E is therefore said to be a transposition.

The canon farther directs in the keys with the flat signatures, to call the last of the flats *fa*, and to place or suppose a cliff accordingly, and to show the effect of the rule in an instance of that kind, the following example is given of the key of F with the minor third:—

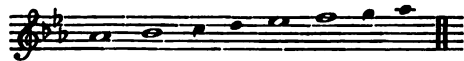


Here the intervals between the second and third, and also between the fifth and sixth notes, are semitones: and to make the last flat, which is D, *fa*, it is necessary to place the bass cliff on the fourth line of the stave, which annihilates the flat signature, and demonstrates that the above key of F is a transposition from that of A with the minor third:—



Another rule for the above purpose, and which indeed Dr. Pepusch would communicate to his favorite disciples, is, in the case of keys with the sharp signatures, to call the last sharp *E*, and count the lines and spaces upwards or downwards till the station of a cliff is found; and the placing that cliff accordingly annihilates the sharps, and bespeaks the natural key. In keys with the flat signatures the rule directs to call the last flat *F*, and count as before.

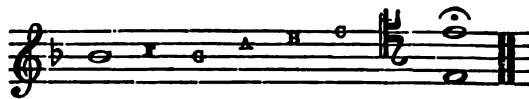
But amongst the keys with flat signatures, a diversity is to be noted, that is to say, between those with a major and those with a minor third; for in the former the process must be repeated, as in this of A b with the major third:—



In this instance the rule directs to call the last flat, which is the key-note, *F*; and to count on to the place of a cliff: in doing this the cliff will fall on the first line, and make the key-note *F*; by which it should seem that the key of A b with the major third is a transposition from *F* also with a major third.



But as there is in the key of F a flat on b, it is necessary to repeat the process, and see what key this of *F* is a transposition from; and this by the above rule is to be done by calling the flat b *F*, and proceeding as before directed:—



and this key of *F* will appear to be a transposition from that of C, and by consequence that of A b, from which that of *F* is transposed, must be a transposition from the key of C also.

then seems to be that there are in nature no other. Now if it be true that the sense of hearing is averse to those modulations that have no relation to any fundamental chord, and that it expects, nay longs for some one sound that shall at stated periods determine the nature of the progression, there is an end of the question. In short, a single experiment of the effect of the Mixolydian mode, which answers to the series from *h* to *h*, in its natural order, and gives to the diapente a semitone less than its true content, will offend the ear, and convince any impartial enquirer that the existence of seven modes is, in the sense contended for, nominal and not real.*

But notwithstanding the uniformity of keys in the modern system, there is a diversity among them worth noting, arising from that surd quantity in the diapason system, which it has been the labour of ages to attempt and distribute among the several intervals that compose it, so as not to be discoverable; the consequences of which temperament is such a diversity in the several keys, as gives to each a several effect; so that upon the whole it seems that the modern constitution of the modes or keys is liable to no objection, save the want of such a division of the intervals as seems to be inconsistent with the principles of harmonics, and the established order of nature.

The several effects of the modern keys are discoverable in the tendency which each has to excite a peculiar temper or disposition of mind; for, not to mention that soothing kind of melancholy which is felt on the hearing music in keys with the minor third, and the gaiety and hilarity excited by that in keys with the greater third,† each key in the two several species is possessed of this power in a different degree, and a person endowed with a fine ear will be

* Vide ante, pag. 59, and Dr. Wallis asserts that there are passages in Ptolemy which plainly indicate that the ancients had a several tuning for every mode, which could not have been necessary had they followed the above order. Farther, to this purpose Malcolm expresses himself in the following remarkable passages:—'If every song kept in one mode, there was need for no more than one diatonic series; and by occasional changing the tune of certain chords these transpositions of every mode to every chord may be easily performed; and I have spoken already of the way to find what chords are to be altered in their tuning to effect this, by the various signatures of *h* and *p*. But if we suppose that in the course of any song a new species is brought in, this can only be effected by having more chords than in the fixed system, so as, from a chord of that, any order or species of octave may be found. On Music, pag. 556.

† If this be the true nature and use of the tones, I shall only observe here, that according to the notions we have at present of the principles and rules of melody, most of these modes are imperfect and incapable of good melody, because they want some of those we reckon the essential and natural notes of a tone mode or key, of which we reckon only two species, viz., that from C and A, or the Parhypate hypaton and Proslambanomenos of the ancient fixed system. Ibid.

Again, if the essential difference of the modes consists only in the gravity or acuteness of the whole octave, then we must suppose there is one species or continuous division of the octave, which being applied to all the chords of the system, makes them true fundamentals for a certain series of successive notes. These applications may be made in the manner already mentioned, by changing the tune of certain chords in some cases, but more universally by adding new chords to the system, as the artificial or sharp and flat notes of the modern scale. But in this case, again, where we suppose they admitted only one continuous species, we must suppose it to be corresponding to the octave *a*, of what we call the natural scale; because they all state the order of the systema immutatum in the diagram, so as it answers to that octave. Ibid 557.

† Dr. Jortin has discovered a new characteristic for these two species of keys; he calls one the male, the other the female: the thought is ingenious, and is thus expressed by him in a letter published at the end of the latter editions of Avison's *Remarks on Musical Expression*:—'By making use of the major and minor third we have two real and distinct tones, a major and a minor, which may be said to divide music, as nature seems to have intended, into male and female. The first hath strength, the second hath softness; and sweetness belongs to them both.'

variously affected by the keys A and F, each with the lesser, as also by those of C and E with the greater third.

Effects like these, but to a degree of extravagance that exceeds the bounds of credibility, are ascribed to the modes of the ancients: that the Dorian was grave and solemn, and the Lydian mild and soothing,* may be believed, but who can credit the relation, though of Cicero himself, and after him Boetius,† that by an air in the Phrygian mode played on a solitary pipe (one of the ancient *tibiae*) a drunken young man, of Tauromenium, was excited to burn down the house wherein a harlot had been shut up by his rival, and that Pythagoras brought him to his reason, by directing the tibicenist to play a spondeus in a different mode? Or that not the fumes of wine or a disturbed imagination, rather than the flute of Timotheus, played on in the Phrygian mode, provoked Alexander to set fire to Persepolis.

CHAP. XIII.

HAVING thus collected into one point of view the sentiments of the ablest writers on those two most important desiderata in the ancient music, the genera and the modes, in order to trace the successive improvements of the science, it is necessary to recur to those only genuine sources of intelligence, the writings of the Greek harmonicians. And here we

cannot but applaud the ingenuity and industry of those learned men, their remote successors, who from ancient manuscripts, dispersed throughout the world, have been able to settle the text of their several works; and who with a great degree of accuracy have given them to the public, together with Latin versions, illustrated with their own learned annotations.

Those whom we are most obliged to in this respect are, Marcus Meibomius, a German; and our countryman Dr. John Wallis: the former of these has given to the world seven of the ancient Greek writers, namely, Aristoxenus, Euclid, Nicomachus, Alypius, Gaudentius, Bacchius Seniori, and Aristides Quintilianus; as also a Discourse on Music, which makes the ninth book of Martianus Capella's Latin work, entitled *De Nuptiis Philologię et Mercurii*; and the latter a complete translation of the harmonics of Ptolemy, with notes, and a most valuable appendix; as also translations of Porphyry and Manuel Bryennius in like manner.

Concerning these writers, it is to be observed that the Greeks are by far of the greatest authority; and that their division of music into several branches, as being more scientific than that of the Latin writers, is entitled to the preference. The most ample of these is the division of Aristides Quintilianus, which is thus analyzed by his editor Meibomius, in his notes on that author, pag. 207:—

Musicae	{	alia est pars Theoretica : cujus rursus partes duae,	{	Physica : quae dividitur in	{	Arithmeticum. Physicam, generi cognominem.
				Artificialis : quae dividitur in		Harmonicam. Rythmicam. Metricam. Meloposia. Rhythmoposia. Poësis.
	{	alia Practica : cujus item partes duae,	{	Usualis : cujus partes	{	Organica. Odica. Hypocritica.
				Enarrativa : cujus partes		

Nevertheless, the most general is that threefold division of music into Harmonica, Rhythmica, and Metrica; the two latter of which, as they relate chiefly to poetry, are but superficially treated of by the harmonic writers. Upon this division of music it is observable that the more ancient writers were very careful in the titles of their several treatises: such of them as confined their discourses to the elementary part of the science, as namely, Aris-

toxenus, Euclid, Nicomachus, Gaudentius, Ptolemy, and Bryennius, call the several treatises written by them Harmonica; whereas Aristides, Bacchius, and Martianus Capella entitle theirs Musica; as does Boetius, although he was a strict Pythagorean. Porphyry indeed, who professes nothing more than to be a commentator on the harmonics of Ptolemy, institutes another mode of division, and, without distinguishing the speculative part of the science from the practical, divides it into six general heads, namely, Harmonica, Rhythmica, Metrica, Organica, Poetica, and Hypocritica; Rhythmica he applies to dancing, Metrica to the enunciative, and Poetica to verses.‡ The branch of the science, which has been

* Milton adopts these characteristics of the Dorian and Lydian modes:

— Anon they move
In perfect phalanx to the Dorian mood
Of flutes and soft recorders; such as rais'd
To height of noblest temper heroes old
Arming to battle. PARADISE LOST, B. I. line 549.

And ever against eating cares
Lap me in soft Lydian airs. L'ALLEGRO.

And Dryden describes the Lydian by its effects, in these words:

Softly sweet in Lydian measures
Soon he sooth'd his soul to pleasures. ALEXANDER'S FEAST.

From which passage it is to be suspected that the poet thought with Cornelius Agrippa and some others, that the epithet Lydian referred to the measure, whereas it clearly relates to the harmony, but Dryden knew little about music.

† De Musica, lib. I. cap. I.

‡ Malcolm has taken notice of this division, but prefers to it that of Quintilian, upon whose analysis he has given the following concise and perspicuous commentary:—'Aristides considers music in the largest sense of the word, and divides it into contemplative and active. The first he says is either natural or artificial; the natural is arithmetical, because it considers the proportion of numbers; or physical, which disputes of everything in nature; the artificial is divided into harmonica, rhythmica (comprehending the dumb motions) and metrica: the active, which is the application of the artificial, is either, enunciative (as in oratory) organical, (or instrumental performance) odical (for voice and singing of poems) hypocritical (in the motions of the

most largely treated by the ancients, is the Harmonica, as will appear by the extracts hereinafter given from their works.

From the relation hereinbefore given of the invention of, and successive improvements made in, music, a very accurate judgment may be formed of the nature of the ancient system, which, together with the ratios of the consonances, and the doctrine of the genera and the modes, constituted the whole of the harmonical science as it stood about the year of the world 3500. After which Aristoxenus, Euclid, Nicomachus, and other Greek writers, made it a subject of Philosophical enquiry, and composed those treatises on harmonics which are severally ascribed to them, and of which, as also of their respective authors, a full account will hereafter be given. What was the state of the science previous to the era above-mentioned, can only be learned from those particulars relating to music, which are to be met with in the several accounts extant of the life and doctrines of Pythagoras, who, for any thing that can now be collected to the contrary, seems indisputably intitled to the appellation of the Father of Music.

PYTHAGORAS, according to the testimony of the generality of writers, was born about the third year of the fifty-third Olympiad, which answers to the year of the world 3384, and to about 560 years before the birth of our Saviour; and although he was of that class of philosophers called the Italic sect, he is supposed to have been a native of Samos, and in consequence of this opinion is usually stiled the Samian sage or philosopher. His father, named Mnesarchus, is reported to have been a merchant, or, as some say, an engraver of rings. Of his travels into various parts of the world for the acquiring of knowledge; of the wonders related of him, or of his doctrines in general, it is needless to give an account in this place. It seems to be agreed that he left not any thing behind him of his writing, and all that is to be known of his doctrines is grounded on the testimony of his disciples, who were very many, and were drawn to hear him from the most distant parts of Greece and Italy. Of these Nicomachus was one, who because he himself has written on the science of harmonics, may well be supposed to understand the doctrines of his master; from him therefore, as also from others, as namely, Ptolemy, Macrobius, and Porphyry, who, though they lived many years after Pythagoras, were of his sect, we may with some degree of confidence determine as to the tenets of his school. A summary of these is given by his learned biographer Stanley, in the passages here cited; and first as to those respecting music in general, he gives them in these words:—

'The Pythagoreans define music an apt composition of contraries, and an union of many, and consent of different; for it not only co-ordinates rhythms and modulation, but all manner of systems. Its end is to unite and aptly conjoin. God is the

'pantomimes'). To what purpose some add hydraulic I do not understand, for this is but a species of the organical, in which water is somehow used, for producing or modifying the sound. The musical faculties, as they call them, are *Melopœia*, which gives rules for the tones of the voice or instrument; *Rhythmopœia*, for motions; and *Pœsia* for making of verse.' Treatise of Music, Edinb. 1731, pag. 455.

'reconciler of things discordant, and this is his chiefest work, according to music and medicine, to reconcile enmities. In music, say they, consists the agreement of all things, and aristocracy of the universe. For what is harmony in the world, in a city is good government; in a family, temperance.'

'Of many sects, saith Ptolemy, that were conversant about harmony, the most eminent were two, the Pythagoric and Aristoxenean; Pythagoras didjudicated it by reason, Aristoxenus by sense. The Pythagoreans, not crediting the relation of hearing, in all those things wherein it is requisite, adapted reasons to the differences of sounds, contrary to those which are perceived by the senses; so that by this criterion (reason) they gave occasion of calumny to such as were of a different opinion.

'Hence the Pythagoreans named that which we now call harmonic Canonic, not from the canon or instrument, as some imagine, but from rectitude; since reason finds out that which is right by using harmonical canons or rules even of all sorts of instruments framed by harmonical rules, pipes, flutes, and the like. They call the exercise Canonic, which although it be not canonic, yet is so termed, because it is made according to the reasons and theorems of canonic; the instrument therefore seems to be rather denominated from its canonic affection. A canonic in general is a harmonic who is conversant by ratiocination about that which consists of harmony. Musicians and harmonics differ; musicians are those harmonics who begin from sense, but canonics are Pythagoreans, who are also called harmonics; both sorts are termed by a general name musicians.*

As touching the human voice, the same author delivers the following as the Pythagorean tenets:—

'They who were of the Pythagorean school said that there are (as of one genus) two species. One they properly named Continuous, and the other Diastematic (intermissive) framing the appellations from the accidents pertaining to each. The Diastematic they conceived to be that which is sung and rests upon every note, and manifests the mutation which is in all its parts, which is inconfused and divided, and disjoined by the magnitudes, which are in the several sounds as coacerved, but not commixt, the parts of the voice being applied mutually to one another, which may easily be separated and distinguished, and are not destroyed together; such is the musical kind of voice, which to the knowing manifests all sounds of what magnitude every one participates: For if a man use it not after this manner, he is not said to sing but to speak.†

'Human voice having in this manner two parts, they conceived that there are two places, which each in passing possesseth. The place of continuous voice, which is by nature infinite in magnitude, receiveth its proper term from that wherewith the speaker began until he ends, that is the place from the beginning of his speech to his conclusive silence. So that the variety thereof is in our power,

* Hist. of Philos. by Thomas Stanley, Esq. folio edit. 1701, pag. 225.

† Ibid.

'but the place of diastematic voice is not in our power, but natural; and this likewise is bound by different effects. The beginning is that which is first heard, the end that which is last pronounced; for from hence we begin to perceive the magnitudes of sounds, and their mutual commutations, from whence first our hearing seems to operate; whereas it is possible there may be some more obscure sounds perfected in nature which we cannot perceive or hear: as for instance, in things weighed there are some bodies which seem to have no weight, as straws, bran, and the like; but when as by apposition of such bodies some beginning of ponderosity appears, then we say they first come within the compass of static. So when a low sound increaseth by degrees, that which first of all may be perceived by the ear, we make the beginning of the place which musical voice requireth.*

These were the sentiments of the Pythagoreans, with respect to music in general, and of voice in particular. Farther, they maintained an opinion which numbers, especially the poets, have adopted, and which seems to prevail even at this day, namely, that music, and that of a kind far surpassing mortal conception, is produced by the motion of the spheres in their several orbits. The sum of this doctrine is comprised in the following account collected by Stanley from Nicomachus, Macrobius, Pliny, and Porphyry:—

'The names of sounds in all probability were derived from the seven stars, which move circularly in the heavens, and compass the earth. The circumagitation of these bodies must of necessity cause a sound; for air being struck, from the intervention of the blow, sends forth a noise. Nature herself constraining that the violent collision of two bodies should end in sound.'

'Now, say the Pythagoreans, all bodies which are carried round with noise, one yielding and gently receding to the other, must necessarily cause sounds different from each other, in the magnitude and swiftness of voice and in place, which (according to the reason of their proper sounds, or their swiftness, or the orbs of repressions, in which the impetuous transportation of each is performed) are either more fluctuating, or, on the contrary, more reluctant. But these three differences of magnitude, celerity, and local distance, are manifestly existent in the planets, which are constantly with sound circumagitated through the ætherial diffusion; whence every one is called ἀστρον, as void of σφοδρῆς, station, and ἀεὶ ἑσῶν, always in course, whence God and Æther are called Θεός and Αἰθήρ.†

'Moreover the sound which is made by striking the air, induceth into the ear something sweet and musical, or harsh and discordant: for if a certain observation of numbers moderate the blow, it effects a harmony consonant to itself; but if it be temerarious, not governed by measures, there proceeds a troubled unpleasant noise, which offends the ear. Now in heaven nothing is produced casually, nothing temerarious; but all things there proceed

'according to divine rules and settled proportions: whence irrefragably is inferred, that the sounds which proceed from the conversion of the celestial spheres are musical. For sound necessarily proceeds from motion, and the proportion which is in all divine things causeth the harmony of this sound. This Pythagoras, first of all the Greeks, conceived in his mind; and understood that the spheres sounded something concordant, because of the necessity of proportion, which never forsakes celestial beings.‡

'From the motion of Saturn, which is the highest and farthest from us, the gravest sound in the diapason concord is called Hypate, because ὑψιστος signifieth highest; but from the lunary, which is the lowest, and nearest the earth, Neate; for νεατος signifieth lowest. From those which are next these, viz., from the motion of Jupiter who is under Saturn, Parypate; and of Venus, who is above the moon, Paraneate. Again, from the middle, which is the sun's motion, the fourth from each part Mese, which is distant by a diatessaron, in the heptachord from both extremes, according to the ancient way; as the sun is the fourth from each extreme of the seven planets, being in the midst. Again, from those which are nearest the sun on each side from Mars, who is placed betwixt Jupiter and the sun, Hypermese, which is likewise termed Lichanus; and from Mercury, who is placed betwixt Venus and the sun, Paramese.§

'Pythagoras, by musical proportion, calleth that a tone, by how much the moon is distant from the earth: from the moon to Mercury the half of that space, and from Mercury to Venus almost as much; from Venus to the sun, sesquiple; from the sun to Mars, a tone, that is as far as the moon is from the earth: from Mars to Jupiter, half, and from Jupiter to Saturn, half, and thence to the zodiac sesquiple. Thus there are made seven tones, which they call a diapason harmony, that is an universal concent, in which Saturn moves in the Doric mood, Jupiter in the Phrygian, and in the rest the like.||

'Those sounds which the seven planets, and the sphere of fixed stars, and that which is above us, termed by them Antichton, make, Pythagoras affirmed to be the nine Muses; but the composition and symphony, and as it were connexion of them all, whereof, as being eternal and unbegotten, each is a part and portion, he named Mnemosyne.¶

That the above notion of the music of the spheres was first entertained by Pythagoras, seems to be agreed by most writers. The reception it has met with has been different, according as the temper of the times, or the different opinions of men have contributed to favour or explode it. Cicero mentions it in such a way as shews him inclined to adopt it, as does also Boetius, lib. I. cap. ii. Macrobius, in his Commentary on the Somnium Scipionis, lib. II. cap. iii. speaks of it as a divine and heavenly notion. Valesius, on the contrary, treats it as an ill-grounded conceit. Sac. Philosoph. cap. xxvi. &c. pag. 446. edit. 1588. Notwithstanding which it has ever been

* Ibid. † Ibid. 386.

‡ Ibid.

§ Ibid.

|| Ibid.

¶ Ibid.

favoured by the poets: Milton, who was a great admirer of music, while at college composed and read in the public school, a small tract *De Sphærarum Concentu*, which with a translation thereof is published in Peck's Memoirs of him. Mr. Fenton, in his notes on Waller, suggests that Pythagoras might possibly have grounded his opinion of the music of the spheres upon a passage in the book of Job, the reasons for this conjecture are very ingenious, and will be best given in his own words, which are these:—

'Pythagoras was the first that advanced this doctrine of the music of the spheres, which he probably grounded on that text in Job, understood literally, "When the morning stars sang together," &c. chap. xxix. ver. 7. For since he studied twelve years in Babylon, under the direction of the learned impostor Zoroastres, who is allowed to have been a servant to one of the prophets, we may reasonably conclude that he was conversant in the Jewish writings, of which the book of Job was ever esteemed of most authentic antiquity. Jamblicus ingenuously confesseth that none but Pythagoras ever perceived this celestial harmony; and as it seems to be a native of imagination, the poets have appropriated it to their own province, and our admirable Milton employs it very happily in the fifth book of his *Paradise Lost*:—

That day, as other solemn days, they spent
In song and dance about the sacred hill:
Mystical dance! which yonder starry sphere
Of planets and of fix'd, in all her wheels
Resembles nearest, mazes intricate,
Eccentric, intervolv'd, yet regular
Then most, when most irregular they seem;
And in their motions harmony divine
So smooths her charming tones, that God's own ear
Listens delighted—*

Censorinus suggests a notable reason why this heavenly music is inaudible to mortal ears, viz., its loudness, which he says is so great as to cause deafness. *De Die Natal.* cap. xi. which Butler has thus ridiculed:—

Her voice, the music of the spheres,
So loud it deafens mortal ears,
As wise philosophers have thought,
And that's the cause we hear it not.

HUDIBRAS, Part II. Cant. i. line 617.

After all, whether the above opinion be philosophically true or not, the conception is undoubtedly very noble and poetical, and as such it appears in the passage above-cited from the *Paradise Lost*, and in this other of Milton, equally beautiful and sublime:—

Ring out, ye chrystal spheres,
Once bless our human ears,
If ye have power to touch our senses so;
And let your silver chime
Move in melodious time,
And let the base of heav'n's deep organ blow.

HYMN ON THE NATIVITY.

Touching the division of the diapason, the following is the doctrine of the Pythagoreans:—

* One of the earliest editors of Milton has the following note on this passage, which Dr. Newton has retained:—
'There is a text in Job xxxviii. 37. that seems to favour the opinion of the Pythagoreans, concerning the musical motion of the spheres,

'The diatonic genus seems naturally to have these degrees and progresses, hemitone, tone and tone, (half note, whole note and whole note); this is the system diatessaron, consisting of two tones, and that which is called a hemitone; and then, another tone being inserted, diapente is made, being a system of three tones and a hemitone. Then in order after this, there being another hemitone, tone and tone, they make another diatessaron, that is to say, another Sesquitercia: so that in the ancients heptachord, all fourths from the lowest, sound a diatessaron one to another, the hemitone taking the first, second, and third place, according to the progression in the tetrachord. But in the Pythagoric octochord, which is by a conjunction a system of the tetrachord and the pentachord, and that either jointly of two tetrachords, or disjointly of two tetrachords separated from one another by a tone, the procession will begin from the lowest, so that every fifth sound will make diapente, the hemitone passing into four places, the first, the second, the third, and the fourth.†

It appears also that Pythagoras instituted the canon of the Monochord, and proceeded to a subdivision of the diatessaron and diapente into tones and semitones, and thereby laid the foundation for the famous *Seccio Canonis*, which Euclid afterwards adjusted, and is given in his Introduction, as also in a foregoing chapter of this work. Duris, an author cited by Porphyry, mentions a brazen tablet, set up in the Temple of Juno by Arimnestus, the son of Pythagoras, near two cubits in diameter, on which was engraven a musical canon, which was afterwards taken away by Simon, a Thracian, who arrogated the canon to himself, and published it as his own.‡

Stanley speaks farther of Pythagoras in these words: 'Pythagoras, saith Censorinus, asserted that this whole world is made according to musical proportion, and that the seven planets betwixt heaven and the earth, which govern the natures of mortals, have an harmonious motion, and intervals correspondent to musical diastemes; and render various sounds, according to their several heights, so consonant that they make most sweet melody; but to us inaudible, by reason of the greatness of the noise, which the narrow passage of our ears is not capable to receive. For, as Eratosthenes collected that the largest circumference of the earth is 252000 stadia, so Pythagoras declared how many stadia there are betwixt the earth and every star. In this measure of the world we are to understand the Italic stadium, which consists of 625 feet, for there are others of a different length, as the Olympic of 600 feet, the Pythic of 600. From the Earth, therefore, to the Moon Pythagoras conceived it to be about 126000 stadia; and that distance, (according to musical proportion) is a tone. From the Moon to Mercury,

though our translation differs therein from other versions. "Concentum celi quis dormire faciet?" Who shall lay asleep, or still the concert of the heaven? But this is to be understood metaphorically of the wonderful proportions observed by the heavenly bodies in their various motions."—HUME.

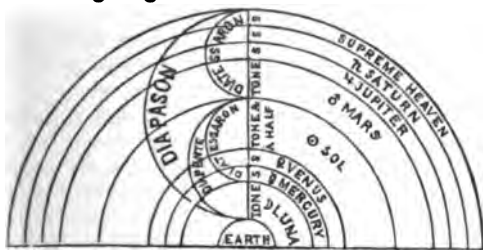
The above is the vulgate translation; that of Beza is less to this purpose, as is also that of Tremellius.

† Stanl. Hist. of Philos. pag. 387.

‡ Ibid 388, 386.

'who is called *στίλβων*, half as much, as it were a hemitone. From thence to Phosphorus, which is the star Venus, almost as much, that is another hemitone: from thence to the Sun twice as much, as it were a tone and an half. Thus the Sun is distant from the Earth three tones and a half, which is called Diapente; from the moon two and a half, which is Diatessaron. From the Sun to Mars, who is called *Πυρόεις*, there is the same interval as from the Earth to the Moon, which makes a tone. From thence to Jupiter, who is called *Φαίδων*, half as much, which makes a hemitone. From thence to the supreme heaven, where the signs are, a hemitone also; so that the diasteme from the supreme heaven to the Sun is Diatessaron, that is two tones and a half: from the supreme heaven to the top of the earth six tones, a diapason concord. Moreover he referred to other stars many things which the masters of music treat of, and shewed that all this world is enarmonic.* Thus Censorinus: 'but Pliny, delivering his opinion of Pythagoras, reckons seven tones from the earth to the supreme heaven; for whereas Censorinus accounts but a hemitone from Saturn to the zodiac, Pliny makes it Sesquiple.†

Stanley represents the intervals of the spheres in the following diagram:—



* These positions of the Pythagoreans, that the universe is framed according to musical proportion, and that all this world is enarmonic, refer to the general frame and contexture of the whole. But there are arguments in favour of music, deducible from the properties and affections of matter, discoverable in its several parts: in short, it may be said in other words, that the whole world is in tune, inasmuch as there are few bodies but are sonorous. The skin of an animal may be tuned to any given note, as is observable in the drum: a cable distended by a sufficient power is as much a musical chord as a lute string or one of wire. And Strada somewhere mentions six great guns in a fortification at Groningen, which from the sounds uttered by them in their explosion, had the names of *UT, RE, MI, FA, SOL, LA*. The percussion of all metals, of stones, nay of timber, or of the trunks of trees when felled, produces a musical sound: hollow vessels, as well of wood, as earth and metal, when struck do the same. Of this fact the Indian Gong, as it is called, is a surprising instance; it is an instrument of brass, or some other factitious metal, in form like a sieve, and about two feet in diameter. The late duke of Argyle had one in his observatory at Whitton, near Twickenham, in Middlesex, which being suspended edgewise by a cord, and struck with a stick muffled at the end, many times, till the quickest vibrations it could make were excited, yielded not only a clear musical sound, but the whole harmony of a diapason, namely, the unison third, fifth, and octave, so clearly and distinctly, that each was obvious to the ear. This instrument is mentioned by Capt. Dampier in one of his voyages, and is thus described by him:—

'In the sultan's mosque [at Mindanao] there is a great drum with but one head, called a Gong, which is instead of a clock. This gong is beaten at twelve o'clock, at three, six, and nine, a man being appointed for that service. He has a stick as big as a man's arm, with a great knob at the end bigger than a man's fist, made with cotton, bound fast with small cords; with this he strikes the gong as hard as he can about twenty strokes, beginning to strike leisurely the first five or six strokes, then he strikes faster, and at last strikes as fast as he can; and then he strikes again slower and slower so many strokes: thus he rises and falls three times a-day, and then leaves off till three hours after.' Dampier's *Voyages*, vol. I. pag. 388.

Glass, and many other bodies, affected by the voice, or the vibrations of chords, return the sounds that agitate them. It is credibly reported of old Smith, the organ-maker, that he could not tune a certain pipe in St. Paul's organ till he had broken a pane of glass in the sash that incloses it.

† Stanl. Life of Pythag. pag. 393.

CHAP. XIV.

In what manner Pythagoras discovered the consonances, and adjusted the system, has already been mentioned. The particulars of his life are related by Jamblichus and other authors; and a summary of his doctrines is contained in the account given of him by the learned Stanley, in his history of Philosophy. Pythagoras lived to the age of eighty, or, according to some writers, ninety years. The manner of his death, which all agree was a violent one, is as variously reported; some say, that being with others at the house of his friend Milo, one who had been refused admittance among them set it on fire, and that Pythagoras, running to escape the flames, was overtaken and killed, together with forty of his disciples, among whom was Archytas of Tarentum.‡ Others say that he fled to the Temple of the Muses at Metapontum, and died for want of food, having lived forty days without eating.§ He had for one of his disciples Philolaus, a Crotonian (although he is classed among those of Tarentum, his followers) whose system of a septenary is hereinbefore inserted; and who was also the inventor of that division of the sesquioctave tone into commas, which Boetius has recognized, and is approved of even at this day. This Philolaus is said to have been the first that asserted the circular motion of the earth, and to have written of the doctrines of the Pythagorean school. One of his books was purchased by Plato of his relations, at forty Alexandrian Minæ, an immense price.||

Among many tenets of the Pythagoreans, one was that there is a general and universal concert or harmony in the parts of the universe, and that the principles of music pervade the whole material world; for which reason they say that the whole world is enarmonic. And in the comparison they assert that those proportions into which the consonances in music are resolvable, are also to be found in those material forms, which from the symmetry of their parts excite pleasure in the beholder. The effect of this principle is in nothing so discoverable as in the works of the architects of ancient times, in which the proportions of 2 to 1, answering to the diapason; of 3 to 2, or Sesquialtera, 4 to 3, or Sesquitercia, are perpetually resulting from a comparison between the longitude and latitude of the whole or constituent parts, such as porticos, pediments, halls, vestibules, and apertures of all kinds, of every regular edifice.

At a time when philosophy had derived very little assistance from experiment, such general conclusions as these, and that the universe was founded on harmonic principles, had little to recommend them but the bare probability that they might be well grounded; but how great must have been the astonishment of a Pythagorean or a Platonist, could he have been a witness to those improvements which a more cultivated philosophy has produced! And how would he who exulted in the discovery that the

‡ Stanley in the Life of Pythagoras, chap. xix.

§ Ibid.

|| Ibid. pag. 436.

consonances had a ratio of 12. 9. 8. 6, have been pleased to hear the consonances at the same instant in a sonorous body; or been transported to find, by the help of a prism, a similar coincidence of proportions among colours, and that the principles of harmony pervaded as well the objects of sight as hearing? For Sir Isaac Newton happily discovered, that the breadths of the seven primary colours in the sun's image, produced by the refraction of his rays through a prism, are proportional to the seven differences of the lengths of the eight musical strings, D, E, F, G, A, B, C, d, when the intervals of their sounds are T, H, t; T, t, H, T.*

The earliest of the harmonic writers, whose works are now extant, was ARISTOXENUS; he was the son of a musician of Tarentum, in Italy, called also Spintharus. Aristoxenus studied music first under his father at Mantinea, and made a considerable proficiency therein: he had also diverse other tutors, namely, Lamprius, Erythræus, Xenophilus the Pythagorean, and lastly Aristotle, whom, as some say, he greatly reviled after his death, for having left his school to Theophrastus, which Aristoxenus expected to have had, he being greatly applauded by his hearers: though others on the contrary assert, that he always mentioned Aristotle with great respect. He lived in the time of Alexander the Great, viz., about the hundred and eleventh Olympiad, which answers nearly to A.M. 3610. There are extant of his writing *Elements of Harmonics*, in three books. He is said to have written on music, philosophy, history, and other branches of learning, books to the number of four hundred and fifty-three, and to have expressly treated on the other parts of music, namely, the Rhythmic, the Metric, and the Organic; but that above-mentioned is the only work of his now remaining.

Touching the elements of Aristoxenus, there is great diversity of opinions: Cicero, who, as being a philosopher, we may suppose to have studied the work with some degree of attention, in his *Treatise de Finibus*, lib. V. 19. pronounces of it that it is utterly unintelligible. Meibomius, on the other hand, speaks of it as a most valuable relique of antiquity, and scruples not to style the author the Prince of Musicians. And the principal end of Euclid's Introduction is to reduce the principles of the Aristoxeneans into form. Notwithstanding all this, a very learned writer, namely, Sir Francis Stiles, of whom mention has already been made, hesitates not to say, that the whole three books of harmonics ascribed to Aristoxenus are spurious. On what authority this assertion is grounded he has forborne to mention; however, as the work is recognized by Ptolemy, and is constantly appealed to by him, as the test of the Aristoxenean doctrine, its authenticity will at this day hardly bear a question.

In the first book of the *Elements of Harmonics* of Aristoxenus, is contained that explanation of the genera, and also of their colours or species, which has already been given from him. The rest of that

book consists of some general definitions of terms, particularly those of Sound, Interval, and System, which, though in some respects arbitrary, all the subsequent writers seem to have acquiesced in.

In his second book we meet with an assertion of the author, which at this day must doubtless appear unintelligible, namely, that music has a tendency to improve or corrupt the morals. This notion, strange as it may seem, runs through the writings of all the ancient philosophers, as well those who did not, as those that did, profess to teach music. Plutarch insists very largely on it; and it is well known what effects the Spartans attributed to it, when they made it an essential in the institution of their youth. Aristophanes, in his comedy of *The Clouds*, puts into the mouth of Justice, whom he represents as engaged in a contest with Injustice, a speech so very pertinent to this subject, that it is here inserted at length, as Mr. Theobald has translated it:—'I'll tell you then what was the discipline of old, whilst I flourished, had liberty to preach up temperance to mankind, and was supported in it by the laws; then it was not permitted for the youth to speech it in public, but every morning the young people of each borough went to their music school, marched with a grave composed countenance through the streets, decent and lightly clothed, even when the snow fell thick. Before their master they sat with modesty, in proper ranks, at distance from each other; there they were taught to sing in lofty strains some hymn to the great and formidable Pallas, or other canto of that kind, in concert with the strong and masculine music of their country, without pretending to alter the tones that had been derived down to them by their forefathers. And if any one were observed to wanton it in his performance, and sing in an effeminate key, like those that now sing your corrupted airs of Phrynia, he was immediately chastised as one that depraved and ruined music. You would not then have seen a single instance of one that should dare commit the least immodesty, or discover ought that honesty enjoined him to hide: they were so scrupulously nice in this respect, that they never forgot to sweep up the sand on which they had sat. None then assumed the lawless minion, or defiled himself with wanton glances; none were suffered to eat what was an incentive to luxury, or injured modesty: radishes were banished from their meals; the anise and rock-parsley that are proper for old constitutions, were forbid them, and they were strangers to high and seasoned dishes: they sat with gravity at table, never encouraged an indecent posture, or the tossing of their legs lazily up and down.'†

† Polybius in his fourth book, chap. iii. has given a description of the ancient Arcadian discipline of youth, nearly corresponding with that of the Spartans above cited, in a passage, which, as it is often alluded to by the writers on music, is here inserted in the words of his elegant translator Mr. Hampson:—

'All men know that Arcadia is almost the only country in which children, even from their most tender age, are taught to sing in measure the songs and hymns that are composed in honour of their gods and heroes: and that afterwards when they have learned the music of Timotheus and Philoxenus, they assemble once in every year in the public theatres, at the feast of Bacchus, and there dance with emulation to the sound of flutes, and celebrate according to their proper age, the children those that are called the puerile, and the

* Vide Smith's *Harmonics*, pag. 31, in a note. And Sir Isaac Newton's *Optics*, book I. part ii. prop. 3. pag. 91 of the quarto edition.

It has already been said that this philosopher did by no means acquiesce in the opinion of Pythagoras and his followers, that the understanding is the ultimate judge of intervals; and that in every system there must be found a mathematical coincidence before such system can be said to be harmonical: this position Aristoxenus and all of his school denied. The philosopher himself, in this second book of his *Elements*, expressly asserts, that 'by the hearing we judge of the magnitude of an interval, and by the understanding we consider its several powers.' And again he says, 'that the nature of melody is best discovered by the perception of sense, and is retained by memory; and that there is no other way of arriving at the knowledge of music;' and though, he says, 'others affirm that it is by the study of instruments that we attain this knowledge;' this, he says, is talking wildly, 'for that as it is not necessary for him who writes an Iambic to attend to the arithmetical proportions of the feet of which it is composed, so it is not necessary for him who writes a Phrygian Cantus to attend to the ratios of the sounds proper thereto.' The meaning of this passage is very obvious, and may be farther illustrated by a comparison of music with painting, the practice whereof is so little connected with the theory of the art, that it requires not the least skill in the former to make a painter. The laws of vision, or the theory of light and colours, never suggest themselves to him who is about to design a picture, whether it be history, landscape, or portrait: the common places in his mind are ideas of effect and harmony, drawn solely from experience and observation; and in like manner the musical composer adverts to those harmonies or melodies, those combinations, which from their effect alone he has found to be the most grateful, without recurring to the ratios that subsist among them.

Aristoxenus then proceeds to a general division of music into seven parts, which he makes to be, 1. The Genera. 2. Intervals. 3. Sounds. 4. Systems. 5. Tones or Modes. 6. Mutations. And 7. Melopœia; and in this method he is followed by Aristides, Nicomachus, and most other ancient writers.

The remainder of the above-mentioned work, the *Elements* of Aristoxenus, is taken up with a discussion of the several parts of music according to the order which he had prescribed to himself. But it must be owned, so great is the obscurity in which his doctrines are involved, that very little instruction is to be obtained from the most attentive perusal of him; nor will the truth of this assertion be questioned, when the reader is told that Cicero himself has pronounced his work unintelligible.* The use, however, proposed to be made of it is occasionally to

refer to such parts of it as are least liable to this censure, and this will be done as often as it shall appear necessary.

The next in order of time of the writers on music is EUCLID, the author of the *Elements* of Geometry. He lived about the year of the world 3617, and wrote an *Introduction to Harmonics*, which he begins with some necessary definitions, particularly of the words *Acumen* and *Gravitas*, terms that frequently occur in the writings of the ancient harmonicians: the first of these he makes to be the effect of intension or raising, and the other of remission or falling the voice. He then proceeds to treat of the genera and the modes; what he has said of each is herein-before mentioned. His *Isagoge* or *Introduction* is a very small tract, and little remains to be said of it, except that it contains the famous *Sectio Canonis*, a geometrical division of a chord for the purpose of ascertaining the ratios of the consonances, herein-before inserted. In this, and also in his opinion touching the *diatessaron* and *diapente*, namely, that the former is less than two tones and a hemitone, and the latter less than three tones and a hemitone, he is a Pythagorean, but in other respects he is apparently a follower of Aristoxenus.† The fundamental principle of Euclid's preliminary discourse to the *Sectio Canonis* is, that every concord arises either from a multiple or superparticular ratio; the other necessary premises are, 1. That a multiple ratio twice compounded, that is multiplied by two, makes the total a multiple ratio. 2. That if any ratio twice compounded makes the total multiple, that ratio is itself multiple. 3. A superparticular ratio admits of neither one nor more geometrical mean proportionals. 4. From the second and third propositions it follows, that a ratio not multiple, being twice compounded, the total is a ratio neither multiple nor superparticular. Again, from the second it follows that if any ratio twice composed make not a multiple ratio, itself is not multiple. 5. The multiple ratio, 2 to 1, which is that of the diapason, and is the least of the kind and the most simple, is composed of the two greatest superparticular ratios 3 to 2, and 4 to 3, and cannot be composed of any other two that are superparticular.‡

The foregoing account of the nature and design of Euclid's division is contained in a series of theorems prefixed to the *Sectio Canonis*, and are reduced to a kind of Summary by Malcolm, who appears to have been extremely well versed in the mathematical part of music.

† Wallis. *Append. de Vet. Harm.* pag. 307.

‡ Malcolm on Music, pag. 508.

The above terms were used by the old arithmetical writers before the invention of fractional arithmetic, since which they have in a great measure been laid aside. What is to be understood by those kinds of musical proportion to which they are severally applied, will hereafter be shewn; however it may here be necessary to give a short explanation of terms, and such a one follows:—

Multiple proportion is when the antecedent being divided by the consequent, the quotient is more than unity; as 25 being divided by 5, it gives 5 for the quotient, which is the multiple proportion.

Superparticular proportion is when one number or quantity contains another one, and an aliquot part, whose radical or least number is one; so that the number which is so contained in the greater, is said to be to it in a superparticular proportion.

To these may be added superpartient proportion, which is when one number or quantity contains another once, and some number of aliquot parts remaining, as one $\frac{3}{2}$, one $\frac{4}{3}$, &c.

* young men the many games. And even in their private feasts and meetings they are never known to employ any hired bands of music for their entertainment, but each man is himself obliged to sing in turn. For though they may without shame or censure disown all knowledge of every other science, they dare not, on the other hand, dissemble or deny that they are skilled in music, since the laws require that every one should be instructed in it: nor can they, on the other hand, refuse to give some proofs of their skill when asked, because such refusal would be esteemed dishonourable. They are taught also to perform in order all the military steps and motions to the sound of instruments; and this is likewise practised every year in the theatres, at the public charge, and in sight of all the citizens.' Hampton's Polybius, pag. 359.

• De Finibus, lib. V. 19.

It was not till the time of Meibomius that the world was possessed of a genuine and accurate edition of the *Isagoge* of Euclid; it seems that a MS. copy of a *Treatise on Harmonics* in the Vatican had written in it 'Incerti Introductio Harmonica;' and that some person has written therein the name of Cleonidas, and some other, with as little reason, Pappus Alexandrinus. Of this MS. Georgius Valla, a physician of Placentia, published at Venice, in 1498, a Latin translation, with the title of *Cleonidas Harmonicum Introductorium*; which after all appears to be a brief compendium of Euclid, Aristides Quintilianus, and Manuel Bryennius, of very little worth: and as to Cleonidas, the reader is as much to seek for who he was, and where he lived, as he would have been had Valla never made the above translation.

Didymus of Alexandria, an author to be reckoned among the *scriptores perditi*, inasmuch as nothing of his writing is now extant, must nevertheless be mentioned in this place: he flourished about the year of the world 4000, and is said to have first discovered and ascertained the difference between the greater and lesser tone. Ptolemy takes frequent occasion to mention him, and has given his division of the diatessaron in each of the three genera.

CHAP. XV.

MARCUS VITRUVIUS POLLIO, the architect, has usually been ranked among the writers on music; not so much because he appears to have been skilled in the art, but for those chapters in his work *De Architectura*, in ten books, written in Latin, and dedicated to the emperor Augustus, in which he treats of it. He flourished in the time of Julius Cæsar, to whom he says he became known by his skill in his profession, which it is agreed was superlatively great; though, to consider him as a writer, it is remarked that his style is poor and vulgar. In some editions of his work, particularly that of Florence, 1496, and in another published at Venice the year after, by some unaccountable mistake he is called Lucius, whereas his true name was Marcus, and so by common consent he is called. In the fifth book of the above-mentioned treatise, chap. iii. entitled *De Theatro*, he takes occasion to treat of sound, particularly that of the human voice, and of the methods practised by the ancients in the construction of their theatres, to render it more audible and musical: the various contrivances for this purpose will doubtless appear strange to modern apprehension, and give an idea of a theatre very different from any that can be conceived without it. His words are as follow:—'The ancient architects having made very diligent researches into the nature of the voice, regulated the ascending gradations of their theatres accordingly, and sought, by mathematical canons and musical ratios, how to render the voice from the stage more clear and grateful to the ears of the audience.' Chap. iv. *harmony*, he says, is a musical literature, very obscure and difficult to such as understand not the Greek language; and, if we are desirous to explain it we must necessarily use Greek words,

some whereof have no Latin appellations; wherefore, says he, 'I shall explain it as clearly as I am able from the writings of Aristoxenus, whose diagram I shall give, and shall define the sounds so as that whoever diligently attends may easily conceive them.' He then proceeds, 'For the changes of the voices, some are acute and others grave. The genera of modulations are three; the first, named in Greek Harmonica, the second Chroma, the third Diatonon; the harmonic genus is grave and solemn in its effect; the chromatic has a greater degree of sweetness, arising from the delicate quickness and frequency of its transitions; the diatonic, as it is the most natural, is the most easy.' He then proceeds to describe the genera in a more particular manner. Chap. v. intitled *De Theatri Vasis*, he speaks of the methods of assisting the voice in the manner following:—'Let vessels of brass be constructed agreeably to our mathematical researches, in proportion to the dimensions of the theatre, and in such manner, that when they shall be touched they may emit such sounds as shall be to each other a diatessaron, diapente, and so on in order, to a disdiapason; and let these be disposed among the seats, in cells made for that purpose, in a musical ratio, so as not to touch any wall, having round them a vacant place, with a space overhead. They must be placed inversely: and, in the part that fronts the stage, have wedges put under them, at least an half foot high; and let there be apertures left before these cells, opposite to the lower beds; these openings must be two feet long, and half a foot high, but in what places in particular they are to be fixed is thus explained. If the theatre be not very large, then let the places designed for the vases be marked quite across, about half way up its height, and let thirteen cells be made therein, having twelve equal intervals between them. In each of these, at the extremes or corners, let there be placed one vase, whose echo shall answer to Nete hyperboleon; then on each side next the corners place another, answering to the diatessaron of Nete synemmenon. In the third pair of cells, reckoning, as before, from the angles, place the diatessaron of Nete parameson; in the fourth pair that of Nete synemmenon; in the fifth the diatessaron of Mese; in the sixth the diatessaron of Hypate meson; and in the middle the diatessaron of Hypate hypaton. In this ratio, the voice, which is sent out from the stage as from a centre, undulating over the whole, will strike the cavities of every vase, and the concords agreeing with each of them, will thereby return clearer and increased; but if the size of the theatre be larger, then let its height be divided into four parts, and let there be made three rows of cells across the whole, one whereof is designed for Harmonia, another for Chroma, and the other for Diatonos. In the first or lower row, which is for Harmonia, let the vases be placed in the same manner as is above directed for the lesser theatre; but in the middle row let those be placed in the corners whose sounds answers to the Chromaticon hyperboleon; in the pair next to the corners the diatessaron,

'to the Chromaticon diezeugmenon ; in the third the diatessaron to the Chromaticon synemmenon ; in the fourth the diatessaron to the Chromaticon meson ; in the fifth the diatessaron to the Chromaticon hypaton ; and in the sixth the diatessaron to the Chromaticon Parameson ; for the Chromaticon hyperboleon diapente has an agreement of consonancy with the Chromaticon meson diatessaron. But in the middle cell nothing need be placed, by reason that in the chromatic genus of symphony no other quality of sounds can have any concordance. As to the upper division or row of cells, let vases be placed in the extreme corners thereof, which answers to the sounds Diatonon hyperboleon ; in the next pair to them the diatessaron to Diatonon diezeugmenon ; in the third the diatessaron to Diatonon synemmenon ; in the fourth the Diatessaron to Diatonon meson ; in the fifth the diatessaron to Diatonon hypaton ; in the sixth the diatessaron to Proslambenomenos : the diapason to Diatonon hypaton has an agreement of symphony with the diapente. But if any one would easily arrive at perfection in these things, let him carefully inspect the diagram at the latter end of the book which Aristoxenus composed with great care and skill, concerning the divisions of modulations,* from which, if any one will attend to his reasoning, he will the more readily be able to effect the constructions of theatres according to the nature of the voice, and to the delight of the hearers.' Thus far Vitruvius.

We are too little acquainted with the nature of the ancient drama to be able to account particularly for the effects of this singular invention : to suppose that in their theatrical representations the actors barely pronounced their speeches, accompanying their utterance with correspondent gesticulations, and a proper emphasis, as is practised in our times, would render it of no use ; for the vases so particularly described and adjusted by this author, are evidently calculated to reverberate, not the tones used in ordinary speech, which have no musical ratio, but sounds absolutely musical : and on the other hand, that the actor should, instead of the lesser inflexions of the voice proper to discourse, make use of the consonances diatessaron, diapente, and diapason, and consequently sing, as well the familiar speeches proper to comedy, as those of the more sublime and exalted kind which distinguish tragedy, is utterly impossible for us to conceive.

If it was for the purpose of reverberating the music used in the dramatic representations of the ancient Romans, that this disposition of hollow vessels, directed by Vitruvius, was practised, we may fairly pronounce that the end was not worthy of the means ; for however excellent the musical theory of the ancients might be, yet in the number and perfection of their instruments they were greatly behind the moderns ; and were it a question, we need look no farther for a proof of the fact than the comedies of Terence, where we are told that the music performed at the acting of each of them was composed by

Flaccus, a freed-man of Claudius ; and that it was played in some instances, as at the Andria, *tibiis paribus, dextris et sinistris* ; and in others, *tibiis paribus generally* ; and at the Phormio *tibiis imparibus*, that is to say, by flutes or pipes right-handed and left-handed, in pairs, or of unequal lengths. This was not at a time when the ancient music was in its infancy : the system had been adjusted many ages before ; and we may look on this refinement mentioned by Vitruvius as the last that the art was thought capable of. It is not here meant to anticipate a comparison, which will come more properly hereafter ; but let any one take a view of the ancient music at the period above referred to, with even the advantage of this improvement drawn from the doctrine of Phonics, and compare it with that of modern times ; let him reflect on the several improvements which distinguish the modern from the ancient music, such as the multiplication of parts, the introduction of instruments, some to extend the compass of sounds, others to increase the variety of tones, and others more forcibly to impress the time and measure, as the drum and other instruments of the pulsatile kind are manifestly calculated to do ; the use of a greater and lesser chorus ; that enchanting kind of symphony, known only to the moderns, called thorough bass ; and those very artful species of composition, fugue and canon. Let this comparison be made, and the preference assigned to that era which has the best claim to it.

Although this work of Vitruvius is professedly written on the subject of architecture, it is of a very miscellaneous nature, and treats of matters very little allied to that art, as namely, the construction of the balista, the catapult, and other warlike engines ; clocks and dials, and the nature of colours. In chap. xi. lib. X. intitled *De Hydraulicis*, he undertakes to describe an instrument called the hydraulic or water-organ, but so imperfectly has he described it, that to understand his meaning has given infinite trouble and vexation to many a learned enquirer. †

For the existence of this strange instrument we have not only the testimony of Vitruvius, but the following passage in Claudian, which cannot by any kind of construction be referred to any other :—

Vel qui magna levi detrudens murmura tactu,
Innumeras voces segetis modulatur ahena ;
Intonat erranti digito, penitusque trabali
Vecte laborantes in carmina concitat undas.

It is said by some that the hydraulic organ was invented by Hero, of Alexandria ; others assert that Ctesibus, about the year of the world 3782, invented an instrument that produced music by the compression of water on the air ; and that this instrument, which answers precisely to the hydraulic organ, was improved by Archimedes and Vitruvius, the latter of whom has given a very particular description of it.

Ctesibus the inventor of it was a native of Alexandria, and the son of a barber. He was endowed

† Merseannus, speaking of this machine, says it is much more complex than the common pneumatic organ, and that he has laboured to describe a thing very obscure, and the meaning of which he could not come at, though assisted by the commentary of Daniel Barbaro. *De Instrumentis Harmonicis*, pag. 138. He farther says that Politian in his *Panepistemon* has in vain attempted to explain it.

* This diagram is inserted in Grassineau's Dictionary, article *GENERA*.

with an excellent genius for mechanic inventions, which he soon discovered in the contrivance of a looking-glass for his father's shop, so hung as that it might be easily pulled down or raised higher by means of a hidden rope. The manner of this invention is thus related by Vitruvius. He put a wooden tube under a beam where he had fastened some pulleys, over which a rope went that made an angle in ascending and descending into the tube, which was hollow, so that a little leaden ball might run along it, which ball, in passing and repassing in this narrow cavity, by violent motion expelled the air that was inclosed, and forced it against that without; these oppositions and concussions made an audible and distinct sound, something like the voice. He therefore on this principle, invented engines which received motion from the force of water inclosed, and others that depended upon the power of the circle or lever; and many ingenious inventions, particularly clocks that move by water. To set these engines at work he bored a plate of gold or a precious stone, and chose such kind of materials, as not being subject to wear by constant passing of the water, or liable to contract filth and obstruct its passage; this being done, the water, which ran through the small hole, raised a piece of cork, or little ship inverted, which workmen call Tympanum, upon which was a rule and some wheels equally divided, whose teeth moving one another made these wheels turn very leisurely. He also made other rules and wheels, divided after the same manner, which by one single motion in turning round produced divers effects; made several small images move round about pyramids, threw up stones like eggs, made trumpets sound, and performed several other things not essential to clock-work. Vitruvius de Architectura, lib. IX. cap. viii.

But to return: The following is the description given by Vitruvius of the hydraulic organ:—

'Autem quas habeant ratiocinationes, quam brevissimè proxime que attingere potero: et scriptura consequi, non prætermittam. De materia compacta basi area in ea ex ære fabricata collocatur. Supra basin eriguntur regulæ dextra ac sinistra scalari forma compactæ: quibus includuntur ærei modiolii fundulis ambulationibus ex torno subtiliter subactis habentibus infixos in media ferreos ancones; et verticulis cum vectibus conjunctos pellibusque lanatis involutos. Item in summa planitie foramina circiter digitorum ternum, quibus foraminibus proximè in verticulis collocati ærei delphini, pendentia habent catenis cymbalia ex ore in fra foramina modiorum celata. Intra aream: quo loci aqua sustinetur in est in id genus uti infundibulum inversum: quem super traxilli alti circiter digitorum ternum superpositi librant spatium imum. Ima inter labra phigæos et aræ fundum. Supra autem cerviculum ejus coagmenta arcula sustinet caput machinæ quæ Græcè Canon Musicus appellatur: in cujus longitudine si canalis tetrachordos est fiunt quatuor. Si exachordos sex. Si octochordos octo. Singulis autem canalibus singula epithonia sunt inclusa manubriis ferreis collocata. Quæ manubria cum torquentur ex arca patefaciunt nares in canales. Ex canalibus autem

'canon habet ordinata in transverso foramina respondentia in naribus; quæ sunt in tabula summa: quæ tabula Græcè Pinas dicitur. Inter tabulam et canona regulæ sunt interpositæ ad eundem modum foratæ ex oleo subactæ: ut faciliter impellantur: et rursus introrsus reducantur: quæ obturant ea foramina: plinthidesque appellantur. Quarum itus et reditus alias obturat: alias operit terebrationes. Hæ regulæ habent ferrea choragia fixa et juncta cum pinnis quarum tactus motiones efficit. Regularum continentur supra tabulam foramina quæ ex canalibus habent egressum spiritus sunt annuli agglutinati: quibus lingulæ omnium includuntur organorum. E modiolis autem fistulæ sunt continentes conjunctæ ligneis cervicibus: pertinentesque ad nares: quæ sunt in arcula: in quibus axes sunt ex torno subacti: et ibi collocati. Qui cum recipit arcula animam spiritum non patientur obturantes foramina rursus redire. Ita cum vectes extolluntur ancones educunt fundos modiolorum ad imum. Delphinique qui sunt in verticulis inclusi calcantes in eos cymbala replent spatia modiolorum: atque ancones extollentes fundos intra modiolos vehementi pulsus cerebritate: et obturantes foramina cymbalis superiora. Aera qui est ibi clausus pressionibus coactum in fistulas cogunt: per quas in ligna concurrunt: et per ejus cervices in arcam. Motione vero vectum vehementiores spiritus frequens compressus epithoniorum aperturisinfluit et replet animæ canales itaque cum pinæ manibus tactæ propellunt et reducunt continenter regulas alterius obturant foramina alterius aperiendo ex musicis artibus multiplicibus modulorum varietatibus sonantes excitant voces.* Quantum potui niti, ut obscura res, per scripturam dilucidè pronuntiaretur; contendi. Sed hæc non est facilis ratio: neque omnibus expedita ad intelligendum præter eos, qui in his generibus habent exercitationem. Quod si qui parum intellexerint e scriptis cum ipsam rem cognoscent: profectò invenient curiosæ et subtiliter omnia ordinata.†

This description, which to every modern reader must appear unintelligible, Kircher has not only undertaken to explain, but the strength of his imagination co-operating with his love of antiquity, and his desire to inform the world, he has exhibited in the Musurgia an instrument which no one can contemplate seriously; and, after all, he leaves it a question whether it was an automaton, acted upon by that air, which by the pumping of water was forced through the several pipes, or whether the hand of a skilful musician, sitting at the front of it, with the quantity of some tons of water in a reservoir under him, was not necessary to produce that music which the bigoted admirers of antiquity ascribe to this instrument, and affect to be so fond of. Isaac Vossius, in his treatise De Poematum Cantu et Viribus Rythmi, pag. 100, has given a representation of the hydraulic organ, no way resembling that of Kircher, but which he yet says is almost exactly conformable to the words of Vitruvius; after which follows a description thereof in words not less

* Vitruvius de Architectura, lib. X. cap. xi.

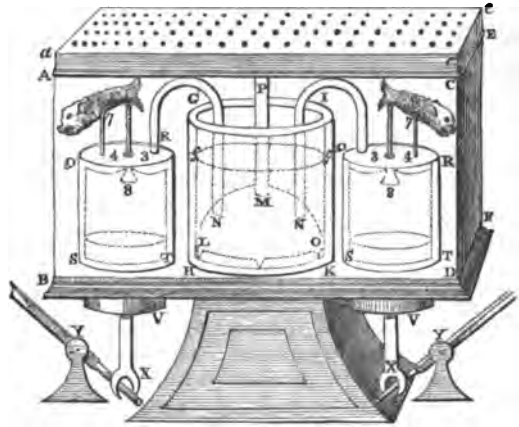
† Ibid. cap. xii.

obscure than those of Vitruvius and Kircher: neither one nor the other of the diagrams will bear the test of an impartial examination, or is worthy to be inserted in any work intended to convey information to a sober enquirer after truth; but the confidence with which Vossius speaks of his discovery will make it necessary to give his delineation of the hydraulic organ, together with a description of it in his own words.

Kircher indeed, after all the pains he had taken, has the modesty to confess the inferiority of the ancient hydraulic to the modern organ; for he says that if the former be compared to the latter it must seem a very insignificant work, for, adds he, 'I cannot perceive what harmony a disposition of four, five, six, or eight pipes could produce, and I very much wonder how Nero should be so exceedingly affected by so small and poor an hydraulic, for Vitruvius testifies that when his life and empire were both in danger, and every thing at the last hazard by a sedition of his generals and soldiers, he did not relinquish his great care and affection, or desire thereof. We may from hence easily form a judgment what great pleasure he must have taken in our modern organs, not composed of four, five, six, or eight pipes, but such as our greater organs of Germany, consisting of eleven hundred and fifty-two double pipes, animated by the help of twenty-four different registers; or had he seen our automata, or engines of this kind which move of their own accord without the help of any hand. Certainly these most enlightened ages have invented several things to which the inventions of the ancients can in no manner be compared.*

Of a very different opinion is the before-cited Vossius, who declares himself not ashamed to assert, not only that the *tibiæ* alone of the ancients are by very far to be preferred to all the instruments of his age, but that, if we except the pipes of the organs, commonly used in churches, it will be found that scarce any others are worthy to be called by the name of *tibiæ*. And he adds, 'even those very organs which now please so much, can by no means be compared to the ancient hydraulics. And the modern *Organarii*, to speak after the manner of the ancients, are not in reality *Organarii*, but *Ascaulæ* or *Utricularii*, that is to say, Bag-pipers, for by that name were those called who furnish wind to the *tibiæ* by the means of bags or wallets, and bellows, as is done in churches.' He farther says that 'those are ridiculous who suppose the above appellations to belong to those mendicants who go about the streets with a *Cornamusa*, and with their arms force out continued and unpleasing sounds.' No, says this sagacious writer, 'the *Ascaulæ* or *Utricularii* did not in the least differ from our modern organists; and the ancient *Organarii* were those only who played on the hydraulic organ, and they were so called from *Organum*, a brazen vessel, constructed like a round altar, out of which the air by the help of the incumbent water is pressed with great force, which yet flows equally

'into the *tibiæ*.'† After remarking on the bad success of many who had attempted to find out the meaning of Vitruvius in his description of this instrument, and to restore it to practice, he says very confidently that he himself has done it, and accordingly exhibits it in the following form:—



And describes it in these words: '*fiat basis lignea A B C D E F, et in ea constituatur ara rotunda G H I K ex ære fabricata et torno fideliter expolita. Fiat quoque clibanus seu hemisphaerium æreum L M N O, quam exactissime huic adaptatum. Sit vero in medio perforatus hic clibanus, et insertum habeat tubum et ipsum æreum et utrinque apertum M P. Habeat quoque clibanus alterum foramen, cui insertus sit siphon N I Q, cujus nares pertingunt ad modiolum æreum Q R S T. Siphon hic habeat assarium seu platysmation ad N. Modiolo vero Q R S T aptetur embolus V cui affixa sit regula firmiter admodum compacta V X, ita ut à vecte X Y Z embolus V commodè moveri possit. Modiolo autem Q R S T habeat in superiori superficie aliud foramen 3, 4, cum platysmatio per quod aer ingredi possit. Iste vero ingredietur cum vectis X Y Z in Z attollitur. Quando vero idem deprimitur, platysmation hoc clauditur, et ingressus aer per siphonem Q I N, aperto platysmatio ad N, exprimitur in clibanum L M N O, unde per tubum M P influit in arcam A a C c E e, cujus afflatu tibiæ animantur. Clibano vero L M N O, quamvis magni sit ponderes, veluti æneo, quo tamen fortius subjectum premat ærem et fidelius ne effluat cunctat, superinfunditur aqua, puta ad f f, vel altius si fortiores velimus efficere sonos. Fiat itaque ex continua vectis agitatione, ut attollatur tandem clibanus L M N O, immoto interim perstante tubo M P, et siphone N I Q, et notandum simulac vehementia ingressi spiritus attollitur clibanus, tum quoque æqualem fieri compressionem æris qui in arca continetur. Licet enim effluente per tibiæ aëre clibanus descendat, idemque rursus agitatione vectis attollatur, quamdiu tamen clibanus suspensus et à fundo separatus manet, tandiu propter æqualitatem prementis ponderis, æqualis etiam manet, inclusi æris constipatio, ipsaque clibani et superinfusæ*

* Musurg. Univ. tom. II. pag. 333.

† Voss. de Poemat. pag. 98.

'aquæ inconstans et mobilis altitudo efficit æqualitatem flatus, quo tibiæ aspirantur.'*

The same author affects to be very merry with those who have asserted that this organ was mounted only with six or eight tibiæ, and cites the foregoing verses of Claudian, and the following exclamation of Tertullian, to prove the contrary:—'Specta portentosam Archimedis (Ctesibii rectius dixisset) munificentiam: organum hydraulicum dico, tot membra, tot partes, tot compagine, tot itinera vocum, tot compendia sonorum, tot commercia modorum, tot acies tibiæ, et una moles erunt omnia. Spiritus ille qui de tormento aquæ anhelat, per partes administratur, substantia solidus, opera divisus.'† He says that the use of the hydraulic organ ceased before the time of Cassiodorus; and that the same appears from a passage in a discourse of that author on the hundred-and-fiftieth Psalm, wherein, without making the least mention of the hydraulic, he bestows the following very high commendations on the pneumatic organ, then in common use:—'An organ is as it were a tower composed of several different fistulæ or pipes, in which the most copious sound is furnished by the blowing of bellows: and that it may be composed of a graceful modulation, it is constructed with certain wooden tongues in the inner part, which being skilfully pressed down by the fingers of the master, produce a great sounding and most sweet cantilena.'‡

He notwithstanding asserts that the hydraulic organ continued in use lower down than the time of Cassiodorus; for that in the French annals of a certain anonymous writer, he is informed that in the year 826, a certain Venetian, called Georgius, or rather Gregorius, constructed a hydraulic organ for Lewis the Pious, at Aix la Chapelle, and that after the manner of the ancients.§ He elsewhere says that the hydraulic organ of Daniel Barbaro, described in his Commentary on Vitruvius, is with great reason exploded by all;|| and that those who in his time had in their writings concerning music, inserted the construction of the Vitruvian organ, while they depreciate the inventions of the ancients, may serve as an example to shew how customary a thing it is for men to despise what they themselves do not understand. This passage is manifestly intended as a censure on Kircher's description of the hydraulic organ, and proves nothing but the extreme bigotry

* De Poemat. pag. 101.

In the cabinet of Christina, queen of Sweden, was formerly a beautiful and large medallion of Valentinian; having on the reverse one of these hydraulic organs, with two men, one on the right, the other on the left side thereof, seeming to pump the water which plays it, and to listen to the sound of it. It had only eight pipes, and those were placed on a round pedestal; the inscription *PLACIA SPETEL*.

† Ibid. pag. 105. In English thus: Behold the wonderful munificence of Archimedes! (he should have said of Ctesibius) I mean the hydraulic organ; so many numbers, so many parts, so many joinings, so many roads or passages for the voices, such a compendium of sounds, such an intercourse of modes, such troops of tibiæ, and all composing one great whole! The spirit or air which is breathed out from this engine of water, is administered through the parts, solid in substance, but divided in operation.

‡ Organum itaque est quasi turris diversis fistulis fabricata, quibus flatus folium vox copiosissima destinatur, et ut eam modulatio decora componat, lingulis quibusdam lignis ab interiore parte constructis, quas disciplinabiliter magistrorum digitis reprimitur grandisonem efficiunt et suavissimum cantilenam. De Poemat. pag. 106.

§ De Poemat. 106.

|| Ibid. pag. 99.

of Vossius.¶ As to the hydraulic organs of modern Italy of which Grassineau says there are several in the grottos of vineyards, particularly one belonging to the family d'Este, near the Tiber, described by Baptista Porta, he says they are very different, and no way resemble the ancient hydraulic organ. These perhaps will be found to be nothing more than the common organ played on by a barrel, which by a very easy contrivance is set in motion by a small stream of water: and that these for more than a century past have been in use in various parts of Italy there is additional evidence. In a book supposed to be written by one Dr. Thomas Powell, a canon of St. David's, entitled *Human Industry*, or a History of the Manual Arts, it is said that Pope Sylvester II. made an organ which was played on by warm water; and that such hydraulics, frequent in Italy, are sounded with cold water. Oldy's *British Librarian*, No. I. pag. 51. And in an old English comedy of Webster, printed in 1623, intitled the *Devil's Law-Case*, Romelia, a wealthy merchant of Naples, speaking of the greatness of his income says,

My factors' wives
Weare shaperoones of velvet; and my scriveners,
Meerely through my employment, grow so rich
They build their palaces and belvidears
With musical water-workes.

Comedy, which in general exhibits a very just representation of contemporary manners and characters, is, in cases of this sort, authority: and the poet, in the passage above-cited, would hardly have pointed out this instance of Italian profusion, had he not had some example in his eye to warrant it.

CHAP. XVI.

BUT to return to the ancient hydraulic organ, a hundred questions might be asked touching the use and application of its several parts, as also what system it was adapted to; and particularly whether those who have undertaken to delineate it with such exactness, have not formed an idea of it from the organ of our own times, and done a violence to historical truth by incorporating two instruments, which cannot possibly exist in a state of union. And after all that can be said in favour of it, the censure of Kircher above-cited, must undoubtedly appear to be very just, and may serve to show what

¶ The enthusiastic attachment to antiquity of this author is strongly evinced by the sentiments he entertains of the energy of the ancient Tibia, which he scruples not to prefer to every instrument of modern invention. His words are these:—'As to what belongs to the cantus of the Tibia which is blown upon by the mouth, I think it may be truly said that the tibiæ know no more concerning that instrument than the ancient shepherds, and perhaps not so much. This most excellent art is banished among the mendicants; and the Tibia, which was by far preferred to all stringed instruments, and to all other instruments of music, is now silenced to such a degree, that, if you except the Chinese alone, who excel in this part, you will find none in this age that can even please a moderate ear; and the very name of the Tibia is justly despised by the European nations. That the Tibia was formerly held in greater esteem, and accounted sweeter than the lyre, is not only evinced by Aristotle, in his problems, but also by the very punishment of Moryas. How great the care and diligence of the ancients was in improving this instrument, sufficiently appears from what both Theophrastus and Pliny have written concerning the reeds of the lake Orchomenus. It was not sufficient that they were cut at certain periods of years, when the lake became dry; unless they were also macerated by the sun, rain, and frost, and afterwards softened by long use; and, remaining without any defect, satisfied the wish of the artists. He who reads and considers these things, will the less wonder that sometimes Tibiæ have been sold for seven talents, as Lucian testifies.' Vossius De Poemat. 107.

little reason there is to lament the loss of many inventions of the ancients, particularly those in which the knowledge of mechanics is any way concerned. The hydraulic organ is one of those ancient inventions mentioned by Pancirollus as now lost,* a misfortune which at this day we lament perhaps with as little reason as we should have for saying that the loss of the ancient Clepsydræ † is not amply compensated by the invention of clocks and watches. With respect to this instrument, it cannot so properly be said to be lost, as to have given way to one of a more artificial construction, and nobler in its effects, as unquestionably the modern organ is. It is remarkable that those who would infer the debility of the later ages, from the few remaining monuments of ancient ingenuity, generally confine themselves to poesy, sculpture, and other arts, which owe their perfection rather to adventitious circumstances, than to the vigorous exertion of the powers of invention: but, with respect to instruments, machines, and engines of various kinds, it is not in the nature of things possible but that mankind must continue to improve as long as the world shall last.

NICOMACHUS GERASENUS, so called from his having been born in Gerasa, a city of Arabia, lived about A. C. 60. He was a philosopher, and wrote an Introduction to Harmony, at the request, as it should seem by the beginning of it, of some learned female contemporary. He was a follower of Pythagoras; and it is by this work alone that we know how, and by what means, his master discovered the consonances. He begins his work with an address to his female friend, whom he styles the most virtuous of women; and reflects with some concern on the difference in sentiment of the several writers on the elements of harmony. He excuses his inability to reconcile them by reason of the long journeys he is obliged to take, and his want of leisure, which he prays the gods to vouchsafe him, and promises to complete a work which he has in contemplation, of which what he now gives seems to be but a part. Professing to follow the Pythagoreans, he considers the human voice as emitting sounds, which are either commensurable by intervals, as when we are said to *sing*; or incommensurable, as when we converse by speech. In this latter use of the voice, he says, we are not obliged by any rule; but in the former we are bound to an observance of those intervals and magnitudes in which harmony does consist.

* Guido Pancirollus De Rerum memorabilium sive deperditarum, lib. I. cap. ii.

† Clepsydra, an hour-glass made with water. The use of Clepsydræ was very ancient, and among the Romans there were several sorts of them; in general they resembled a sand hour-glass, which is composed of two vessels, so joined at top and bottom, as that which is contained in the upper may run into the under of them. The Clepsydræ contained water, which passing through a small hole, imperceptibly raised a piece of cork with an index fixed thereto that pointed to the hours marked on the under glass. They were all subject to two inconveniences: the first was that which Plutarch takes notice of, to wit, that the water passed through with more or less difficulty, according as the air was more or less thick, cold, or hot, for that hindered the hours from being equal; the other was, that the water ran faster at first, when the vessel from whence the water came was full, than at last.

These Clepsydræ were chiefly used in a city called Achanta, beyond the Nile. In this city there was a huge vessel of this kind, into which three hundred and sixty-five priests daily brought water from the Nile, which running out of the vessel again, declared the hours. The use of the Clepsydra was to tell the hour in the night, or in cloudy weather when it could not be found by the sun-dial.

The sounds and their names, continues this author, are probably taken from the seven planets in the heavens which surround this earth; for it is said that all bodies which are carried round with any great degree of velocity, must necessarily, and by reason of their magnitude, and the celerity of their motions, cause a sound, which sound will vary in proportion to the degrees of magnitude in each, the celerity of their motions, or the repression of the orb wherein they act. These differences, he says, are manifest in the planets, which perpetually turn round, and produce their proper sounds: for example, the motion of Saturn, the planet most distant from us, produces a sound the most grave, in which it resembles the consonance diatonic; as does Hypate, which signifies the same as principal. To the motion of the moon, the lowest of the planets, and nearest the earth, we apply the most acute term, called Nete, for Neaton is the same as low.

He then proceeds to declare the supposed analogy between the rest of the planets and the intermediate chords, as mentioned in the foregoing account of Pythagoras. But here it may be proper to take notice that the ancient writers were not unanimous in opinion that the graver sounds were produced by the bodies of greatest magnitude: Cicero, in particular, is by Glareanus ‡ said to have maintained that the lesser bodies produce the graver sounds, and the greater the more acute. And from this dictum of Cicero, Glareanus has been at the pains of forming a diagram, intended to represent this fanciful coincidence of revolutions and harmonies, which is given in a subsequent page of this work.

In the Somnium Scipionis, which is what Glareanus means when he refers to Cicero de Republica, lib. VI. is a great deal concerning the music of the spheres in general; and Macrobius, in his commentary on that fragment, has made the most of it. Nevertheless the general sentiment of mankind seems till very lately § to have been that the whole doctrine is to be regarded as a poetical fiction; and as to the fact, that it has no foundation in reason or philosophy.

But to return to our author Nicomachus, and his opinion of the harmony of the planets: it is true, says he, that it is inaudible to our ears, but to our reason it is clear.

Nicomachus proceeds to define the terms made use of by him, distinguishing, as others of the ancients do, between sound and noise. Speaking of instruments, he says they are of two kinds, viz., such as are blown, as are the flute, trumpet, organ, and the like; or such as are strung, to wit, the lute, lyre, and harp; of the latter kind are also the monochord, by many called the Pandora, || and by

‡ Dodecachordon, lib. II. cap. xlii.

§ See a subsequent note, in the present book, containing the sentiments of Dr. Gregory and Mr. MacLaurin on this subject.

|| An appellative from which the English word Bandore seems clearly to be derived. Meibomius gives the following note on this passage:—

* *ᾠδὸς παρὰ*. [Phandourous.] Hesychius speaks of it thus: "Pandura "or Panduris is a musical instrument; Pandurus he who plays on that instrument." Monochords were also by some called Phanduras. Nicomachus here says the same, and seems as if he approved of the practice. These instruments are various; Pollux, lib. IV. cap. ix. says, "The monochord was invented by the Arabians, and the trichord

the Pythagoreans the Canon, and also the Trigon or triangular dulcimer. He also mentions crooked and other flutes made of the box-tree, of which he proposes to speak again. Of the stringed species he says those with the greater tensions express the more acute sounds; on the contrary, those with the lesser give the more languid and grave; and in instruments that are blown, the more hollow and long, the more languid and grave are their sounds. He then proceeds to relate how Pythagoras discovered the consonances, and to give that account of his system which Stanley has taken into his life of that philosopher, and is inserted in the foregoing part of this work, together with some remarks, the result of late experiments, which in some degree, though not essentially, weaken the credit of the relation.

But without enquiring farther into the weight of the hammers, and other circumstances attending the discovery of the consonances, we may very safely credit Nicomachus, so far as to believe that Pythagoras, by the means of chords of different lengths, did discover them; that the philosopher to the sound produced by the first number six, gave the name Hypate; to eight he gave Mese, which is sesquitercian thereto; to nine Paramese, which is a tone more acute, and therefore sesquioctave of the last; and to the last number, twelve, he gave the name Nete; and afterwards filled up the intermediate spaces with sounds in the succession proper to the diatonic genus, and thereby completed the system of eight chords. The diatonic genus, as this author describes it, is a natural progression to the system of a diatessaron by a semitone, tone, and tone; and to a diapente by three tones and a semitone. This is the manner in which it is said the ancient system was adjusted and extended to that of a complete octave, an improvement so much the more to be valued, as we are told that in the ancient or primitive lyre, all the sounds from the lowest were fourths to each other; * whereas in the Pythagorean lyre, composed of a tetrachord and pentachord conjoined; or, which is the same, of two tetrachords disjoined by an intervening tone, we have a continued progression of sounds.

Nicomachus proceeds to relate that the magnitude of the scale in the diatonic genus is two diapasens, for that the voice cannot easily extend itself either upwards or downwards beyond this limit; and for this reason, to the ancient lyre formed of seven strings, by the conjunction of two tetrachords, each extending from Hypate to Mese, and thence to Nete, were adjoined two tetrachords at the outward extremity of the former; that which began at Nete was called Hyperboleon, signifying excellent. This tetrachord, he says, consists of three

adjoined sounds, whose names are worthy to be remembered; as first, Trite hyperboleon, then Paranete hyperboleon, and lastly, Nete hyperboleon. The other tetrachord was joined to the chord Hypate, and was thence called Hypaton; and each of the three adjoined sounds had the addition of Hypaton to distinguish it from the chord of the same denomination in the lower of the two primitive tetrachords; thus Hypate hypaton, Parhypate hypaton, Diatonos hypaton, or Lychanos hypaton, for it matters not which it is called; and this system from Hypate hypaton to Mese is seven chords, making two conjoint tetrachords; and that from Hypate hypaton to Nete is thirteen; so that Mese having the middle place, and conjoining two systems of a septenary each, reckoning either upwards from Hypate hypaton, or downwards from Nete hyperboleon, each system contained seven chords.

From this it is evident that the additional tetrachords were originally adapted to the system of Terpander, which did not separate Mese from Trite by a whole tone, as that of Pythagoras did. What advantages could be derived from this addition it is not easy to say; nor is it conceivable that that system could be reducible to practice which gave to a nominal diapason four tones and three hemitones, instead of five tones and two hemitones.

But the addition of the new tetrachords to the two disjunct tetrachords of Pythagoras was very natural, and made way for what this author next proceeds to mention, the tetrachord synemmenon, which took place in the middle of that interval of a tone, by which Pythagoras had divided the two primitive tetrachords. The design of introducing this tetrachord synemmenon, which placed Trite but a hemitone distant from Mese, was manifestly to give to Parhypate meson what it wanted before, a perfect diatessaron for its nominal fourth; and this opinion of its use is maintained by all who have written on the subject of music.

The author then proceeds to a verbal enumeration of the several chords, which by the disjunction made by Pythagoras, and the addition of Proslambanomenos, it appears were increased to fifteen, with their respective tonical distances: it has already been mentioned, that, contrary to the method now in use, the ancients gave the most grave sounds the uppermost place in their scale; he therefore begins with Proslambanomenos and reckons downwards to Nete hyperboleon:

He gives the same kind of enumeration of the several sounds that compose the tetrachord synemmenon, having first Trite synemmenon at the distance of a hemitone from Mese, then after a tone Paranete synemmenon, and after another tone Nete synemmenon of the same tenor and sound as Paranete diezeugmenon.

Mese	
	Hemitone
Trite	
	Tone
Paranete	
	Tone
Nete	

* "by the Assyrians, who gave it the name of Pandura." He justly says 'that Pandura was an Assyrian word. But the most learned of the Hebrews do not seem sufficiently to understand the signification of it; they explain it by a twig or rod, whip, thong of leather, as appears from Buxtorf in the Talmudical Lexicon, from Talmud Hieroeol. I imagine the true origin of this appellation to be this, the instrument was mounted or stretched with thongs of bull's hides, in the same manner as the pentachord of the Scythians, concerning which the same Pollux speaks thus:—"The pentachord is an invention of the Scythians, it was stretched or mounted with thongs made of the raw hides of oxen, but their plectra were the jaw bones of she-goats." Nicomach. Harmonic. Manual. pag. 5, ex vers. Melibom.

So that there exist five tetrachords, Hypaton, Meson, Synemmenon, Diezeugmenon, and Hyperboleon; though it is to be remembered that the third of these is but auxiliary, and whenever it is used it is only in the room of the fourth, for reasons before given; and in these tetrachords there are two disjunctions and three conjunctions; the disjunctions are between Nete synemmenon and Nete diezeugmenon, and between Proslambanomenos and Hypate hypaton: the conjunctions are between Hypaton and Meson, and, which is the same, Meson and Synemmenon, and between Diezeugmenon and Hyperboleon.

We must understand that the foregoing is a representation of the tetrachords as they are divided in the diatonic genus, the characteristic whereof is a progression by a hemitone, tone, and tone; for as to the other genera, the chromatic and enharmonic, this author professes not to deliver his sentiments, but promises to give them at large, together with a regular progression in all the three in his Commentaries, a work he often speaks of, as having undertaken it for the information of his learned correspondent: he also engages to give the testimonies of the ancients, the most learned and eloquent of men on this subject, and an exposition of Pythagoras's section of the canon, not as Eratosthenes or Thrasyllus badly understand it, but according to Locrus Timæus, the follower of Plato, although nothing of his on the subject is remaining at this day; however he has given an idea of the genera in the following words:—'The first and most simple of consonances is the diatessaron. The diatonic tetrachord proceeds by a hemitone, tone, and tone, or four sounds and three intervals; and it is called diatonic, as proceeding chiefly by tones. The chromatic progression in the tetrachord is by a hemitone, hemitone, and an incomposite trihemitone, and therefore, though not constituted as the other, it contains an equal number of intervals. The enharmonic progression is by a diesis, which is half a hemitone, another diesis, also half a hemitone, and the remainder is an incomposite ditone; and these latter are also equal to a hemitone and two tones. Amongst these it is impossible to adapt sound to sound, for it is plain that the difference of the genera does not consist in an interchange of the four sounds, but only of the two intermediate ones; in the chromatic the third sound is changed from the diatonic, but the second is the same, and it has the same sound as the enharmonic; and in the enharmonic the two intermediate sounds are changed, with respect to the diatonic, so as the enharmonic is opposite to the diatonic, and the chromatic is in the middle between them both; for it differs only a hemitone from the diatonic, whence it is called chromatic, from Chroma, a word signifying a disposition flexible and easy to be changed: in opposition to this we call the extremes of each tetrachord Stantes, or standing sounds, to denote their immovable position. This then is the system of the diapason, whether from Mese to Proslambanomenos, or from Mese to Nete hyperboleon; and as the diatessaron is two tones and a hemitone,

and the diapente three tones and a hemitone, the diapason should seem to be six whole tones; but in truth it is only five tones and two hemitones, which hemitones are not strictly complete; and therefore the diapason is somewhat less than six complete whole tones:* and with this agree the words of Philolaus when he says that harmony hath five superoctaves and two dieses; now a diesis is the half of a hemitone, and there is another hemitone required to make up the number six.'

His second book Nicomachus begins with an account of the invention of the lyre of Mercury, already related, and which has been adopted by almost every succeeding writer on music, adding that some among the ancients ascribed it to Cadmus the son of Agenor. He proceeds to state the proportions, which he does in a way not easily reconcilable with the practice of the moderns: he then reconsiders the supposed relation between the sounds in the harmonical septenary and the motions of the planets; and endeavours to account for these different denominations, which it seems were given them in his days. He says that the chord Hypate is applied to Saturn, as the chief of the planets, and Nete to Luna, as the least. Mese is Sol, Parhypate is attributed to Jove, Paramese not to Mercury but to Venus, by a perverse order, says his editor, unless there is an error in the manuscript. Paramese to Mars, Trite to Venus, Luna or the Moon is said to be acute, as it answers to Nete; and Saturn grave as is Hypate. Those that reckon contrarywise, applying Hypate to the Moon, and Nete to Saturn, do it, because say they the graver sounds are produced from the lower and more profound parts of the body, and therefore are properly adapted to the lower orbs; whereas the acute sounds are formed in the higher parts, and do therefore more naturally resemble the more remote of the heavenly bodies:—

Saturn	-	-	-	-	Nete
Jupiter	-	-	-	-	Paraneta
Mars	-	-	-	-	Paramese
Sol	-	-	-	-	Mese
Venus	-	-	-	-	Lichanos
Mercury	-	-	-	-	Parhypate
Luna	-	-	-	-	Hypate

Nicomachus then proceeds to enumerate the several persons who added to the system of the diapason, completed as it was by Pythagoras; but as he expressly says the additional chords were not adjusted in any precise ratio, and as their names have already been given, it seems needless to be more particular about them. Speaking of the great system, viz. that of the diadiapason, he cites Ptolemy, to show that it must necessarily consist of fifteen chords; but as it is certain that Nichomachus lived A. C. 60, and that Claudius Ptolemæus flourished about one hundred and forty years after the commencement of the Christian Æra, there arises an anachronism, which is not to be accounted for but upon a supposition that the manuscript is corrupted. From divers passages in this author, and others to be met with in the Greek

* This is demonstrated by Ptolemy, lib I. cap. xi. of his Harmonics, and also by Boetius, lib V. cap. xiii.

writers, it is evident that the ancients were not wholly unacquainted with the doctrine of the vibrations of chords: they had observed that the acute sounds were produced by quick, and the grave by slow motions, and that the consonances arose from a coincidence of both; but it no where appears that they made any use of the coincidences in adjusting the ratios of the consonances; on the contrary, they seem to have referred the whole to the ratio of lengths and tensions by weights, and a division of the monochord; and in this respect it is unquestionably true that the speculative part of music has received considerable advantages from those improvements in natural philosophy which in the latter ages have been made. The inquisitive and accurate Galileo was the first that investigated the laws of pendulums: he found out that all the vibrations of the same string, the longer and the shorter, were made in equal time, that between the length of a chord and the number of its vibrations, there subsists a duplicate proportion of length to velocity; and that the length quadrupled will subduple the velocity of the vibrations, and the length subquadrupled will double the vibrations; for the proportion holds reciprocally: adding to the length will diminish, and shortening it will encrease the frequency of vibrations. These, and numbers of other discoveries, the result of repeated experiments, have been found of great use, as they were soon after the making of them applied to the measure of time, and other most valuable purposes.

Having given an extract which contains in substance almost the whole of what Nicomachus has given us on the subject of harmony, it remains to observe that his work is manifestly incomplete: it appears from his own words to have been written while he was upon a journey, and for the particular information of the lady to whom he has, in terms of the greatest respect, inscribed it; and is no other than what he himself with great modesty entitles it, a *Manual*; it is however to be esteemed a very valuable fragment, as it is by much the most clear and intelligible of the works of the Greek writers now remaining. Boetius, in his treatise *De Musica*, cites divers passages from Nicomachus that are not to be found in this discourse of his, from whence it is highly probable that he had seen those commentaries which are promised in it, or some other tract, of which at this distance of time no account can be given.

CHAP. XVII.

PLUTARCH is also to be numbered among the ancient writers on music, for in his *Symposiaca* is a discourse on that subject, which is much celebrated by Meibomius, Doni, and others. A passage in the French translation, by Amyot, of the works of that philosopher, has given rise to a controversy concerning the genuineness of this tract, the merits of which will hereafter be considered. This discourse contains in it more of the history of the ancient music and musicians than is to be met with anywhere else, for which reason it is here meant to give a copious extract from it. It is written in dialogue;

the speakers are Onesicrates, Soterichus, and Lysias. The latter of these, in answer to a request of Onesicrates, gives a relation of the origin and progress of the science, in substance as follows:—

‘According to the assertion of Heraclides, in a *Compendium of Music*, said to have been written by him, Amphion, the son of Jupiter and Antiope, was the inventor of the harp and of Lyric poesy; and in the same age Linus the Euboean composed elegies: ‘Anthes of Antheion in Boeotia was the first author of hymns, and Pierius of Pieria of verses in honour of the Muses; Philamon the Delphian also wrote a poem, celebrating the nativity of Latona, Diana, and Apollo; and was the original institutor of dancing about the temple of Delphos. Thamyris, of Thracian extraction, had the finest voice, and was the best singer of his time, for which reason he is by the poets feigned to have contended with the Muses; he wrought into a poem the war of the Titans against the gods. Demodocus the Coreyean wrote in verse the history of the destruction of Troy, and the nuptials of Vulcan and Venus. To him succeeded Phemius of Ithaca, who composed a poem on the return of those who came back with Agamemnon from the siege of Troy; and besides that these poems were severally written by the persons above-named, they were also set to musical notes by their respective authors. The same Heraclides also writes that Terpander was the institutor of those laws by which the metre of verses, and consequently the musical measure, were regulated; and according to these rules he set musical notes both to his own and Homer’s words, and sung them at the public games to the music of the lyre. Clonas, an epic and elegiac poet, taking Terpander for his example, constituted rules which should adjust and govern the tuning and melody of flutes or pipes, and such-like wind-instruments; and in this he was followed by Polymnestes the Colophonian.

‘Timotheus is said to have made lyric preludes to his epic poems, and to have first introduced the dithyrambic, a measure adapted to songs in the praise of Bacchus, which songs required a violent motion of the body, and a certain irregularity in the measure.

‘Farther of Terpander, one of the most ancient of musicians, he is recorded to have been four times a victor at the Pythian games.

‘Alexander the historian says, that Olympus brought into Greece the practice of touching the strings of the lyre with a quill; for before his time they were touched by the fingers: and that Hyagnis was the first that sang to the pipe, and Marsyas his son the next, and that both these were prior to Olympus. He farther says that Terpander imitated Homer in his verses, and Orpheus in his music; but that Orpheus imitated no one. That Clonas, who was some time later than Terpander, was, as the Arcadians affirm, a native of Tegea, a city of Arcadia; though others contend that he was born in Thebes; and that after Terpander and Clonas flourished Archilochus: yet some writers affirm

'that Ardalus the Troezenian taught wind-music before Clonax.

'The music appropriated to the lyre under the regulations of Terpander continued without any variation, till Phrynis became famous, who altered both the ancient rules, and the form of the instrument to which they were adapted.'

Having thus discoursed concerning the ancient musicians, and stringed and wind-instruments in general, Lysias proceeds, and confining himself to the instruments of the latter kind, speaks to this effect:—

'Olympus, a Phrygian, and a player on the flute, invented a certain measure in honour of Apollo, which he called Polycephalus or of many heads. This Olympus, as it is said, was descended from the first Olympus, the son of Marsyas, who being taught by his father to play on the flute, first brought into Greece the laws of harmony. Others ascribe the invention of the Polycephalus to Crates, the disciple of Olympus. The same Olympus was the author of the Harmatian mood, as Glaucus testifies in his treatise of the ancient poets, and as some think of the Orthian mood also.* There was also another mood in use among the ancients, termed Cradias, which Hipponax the Mimnermian greatly delighted in. Sacadas of Argos, being himself a good poet, composed the music to several odes and elegies, and became thrice a victor at the Pythian games. It is said that this Sacadas, in conjunction with Polymnestes, invented three of the moods, the Dorian, the Phrygian, and the Lydian; and that the former composed a strophe, the music whereof was a commixture of all the three. The original constitution of the modes was undoubtedly by Terpander, at Sparta; but it was much improved by Thales the Gortynian, Xenodamus the Cytherian, Xenocritus the Locrian, and Polymnestes the Colophonian.

'Aristoxenus ascribes to Olympus the invention of the enarmonic genus; for before his time there were no other than the diatonic and chromatic genera.

'As to the measures of time, they were invented at different periods and by different persons. Terpander, amongst other improvements which he made in music, introduced those grave and decent measures which are its greatest ornament; after him, besides those of Terpander, which he did not reject, Polymnestes brought into use other measures of his own; as did also Thales and Sacadas, who, though of fertile inventions, kept within the bounds of decorum. Other improvements were also made by Steichorus and Alcmas, who nevertheless re-

ceded not from the ancient forms; but Cræxus, Timotheus, and Philoxenus, and others of the same age, affecting novelty, departed from the plainness and majesty of the ancient music.'

Another of the interlocutors in this dialogue of Plutarch, Soterichus by name, who is represented as one not only skilled in the science but eminently learned, speaks of the invention and progress of music to this effect:—

'Music was not the invention of any mortal, but we owe it to the god Apollo. The flute was invented neither by Marsyas, nor Olympus, nor Hyagnis, but Apollo invented both that and the lyre, and, in a word, all manner of vocal and instrumental music. This is manifest from the dances and sacrifices which were solemnized in honour of Apollo. His statue, placed in the temple of Delos, holds in his right hand a bow, and at his left the Graces stand with each a musical instrument in her hand, one bearing a lyre, another a flute, and another a shepherd's pipe; and this statue is reported to be as ancient as the time of Hercules. The youth also that carries the temple laurel into Delphos is attended by one playing on the flute; and the sacred presents of the Hyperboreans were sent of old to Delos, attended by flutes, pipes, and lyres; and some have asserted that the God himself played on the flute. Venerable therefore is music, as being the invention of Gods; but the artists of these later times, condemning its ancient majesty, have introduced an effeminate kind of melody, mere sound without energy. The Lydian mode, at first instituted, was very doleful, and suited only to lamentations; wherefore Plato in his Republic utterly rejects it. Aristoxenus in the first book of his Harmonics relates that Olympus sung an elegy in that mode on the death of Python; though some attribute the invention of the Lydian mode to Menalippides, and others to Torebus. Pindar asserts that it was first used at the nuptials of Niobe; Aristoxenus, that it was invented by Sappho, and that the tragedians learned it of her, and conjoined it with the Dorian; but this is denied by those who say that Pythocleides the player on the flute, and also Lysis the Athenian, invented this conjunction of the Dorian with the Lydian mode. As to the softer Lydian, which was of a nature contrary to the Lydian properly so called, and more resembling the Ionian, it is said to have been invented by Damon the Athenian. Plato deservedly rejected these effeminate modes, and made choice of the Dorian, as more suitable to warlike tempers; not that we are to suppose him ignorant of what Aristoxenus has said in his second book, that in a wary and circumspect government advantages might be derived from the use of the other modes; for Plato attributed much to music, as having been a hearer of Draco the Athenian, and Metellus of Agrigentum; but it was the consideration of its superior dignity and majesty that induced him to prefer the Dorian mode. He knew moreover that Alcmas, Pindar, Simonides, and Bacchylides, had composed several Parthenioi in

* These moods, the Harmatian and Orthian, were unquestionably moods of time. The former, if we may trust the English translator of Plutarch's Dialogue on Music, as it stands in the first volume of his *Morals*, Lond. 1684, was the measure termed by Zarino, *La Curule*, in which it is supposed was sung the story of Hector's death, and of the dragging him in a chariot round the walls of Troy: of the Orthian mood the same translator gives the following description:—'This mood consisted of swift and loud notes, and was used to inflame the courage of soldiers going to battle, and is mentioned by Homer in the seventh book of the *Iliad*, and described by Eustathius. This mood Arion made use of when he flung himself into the sea, as Aulus Gellius writes, lib. XVI. cap. xix. the time of it was two down and four up.' Melibonius on Aristides.

'the Dorian mode; and that supplications and hymns to the Gods, tragical lamentations, and sometimes love-verses were also composed in it; but he contented himself with such songs as were made in honour of Mars and Minerva, or those other that were usually sung at the solemn offerings called Spondalia. The Lydian and Ionian modes were chiefly used by the tragedians, and with these also Plato was well acquainted. As to the instruments of the ancients, they were in general of a narrow compass; the lyre used by Olympus and Terpander, and their followers, had but three chords, which is not to be imputed to ignorance in them, for those musicians who made use of more were greatly their inferiors both in skill and practice.

'The chromatic genus was formerly used by those who played on the lyre, but by the tragedians never. It is certainly of greater antiquity than the enarmonic; yet the preference given to the diatonic and enarmonic was not owing to ignorance, but was the effect of judgment. Telephanes of Megara was so great an enemy to the syrinx or reed-pipe, that he would never suffer it to be joined to the tibia; or that other pipe made of wood, generally of the lote-tree, and for that reason he forbore to go to the Pythian games. In short, if a man is to be deemed ignorant of that which he makes no use of, there would be found a great number of ignorant persons in this age; for we see that the admirers of the Dorian mode make no use of the Antigenidian method of composition: and other musicians refuse to imitate Timotheus, being bewitched with the trifles and idle poems of Polyeides.

'If we compare antiquity with the present times, we shall find that formerly there was great variety in music, and that the diversities of measure were then more esteemed than now. We are now lovers of learning, they were lovers of time and measure; plain it is therefore that the ancients did not because of their ignorance, but in consequence of their judgment, refrain from broken measures; and if Plato preferred the Dorian to the other modes, it was only because he was the better musician; and that he was eminently skilled in the science appears from what he has said concerning the procreation of the soul in his *Timæus*.

'Aristotle, who was a disciple of Plato, thus labours to convince the world of the majesty and divine nature of music: "Harmony, saith he, descended from heaven, and is of a divine, noble, and angelic nature; being fourfold as to its efficacy, it has two mediums, the one arithmetical, the other harmonical. As for its members, its dimensions, and excesses of intervals, they are best discovered by number and equality of measure, the whole system being contained in two tetrachords."

'The ancient Greeks were very careful to have their children thoroughly instructed in the principles of music, for they deemed it of great use in forming their minds, and exciting in them a love of decency, sobriety, and virtue: they also found it a powerful incentive to valour, and accordingly made use of pipes or flutes when they advanced to battle: the

'Lacedemonians and the Cretans did the same; and in our times the trumpet succeeding the pipe, as being more sonorous, is used for the same purpose. The Argives indeed at their wrestling matches made use of fifes called Schenia, which sort of exercise was at first instituted in honour of Danaus, but afterwards was consecrated to Jupiter Schenius or the Mighty; and at this day it is the custom to use fifes at the games called Pentathla, which consist of cuffling, running, dancing, hurling the ball, and wrestling. But among the ancients, music in the theatres was never known; for either they employed it in the education of their youth, or confined it within the walls of their temples; but now our musicians study only compositions for the stage.

'If it should be demanded, Is music ever to remain the same, and is there not room for new inventions? The answer is that new inventions are allowed, so as they be grave and decent; the ancients themselves were continually adding to and improving their music. Even the whole Mixolydian mode was a new invention; such also were the Orthian and Trochean songs; and, if we may believe Pindar, Terpander was the inventor of the Scolian song, and Archilocus of the iambic and divers other measures, which the tragedians took from him, and Crexus from them. The Hypolydian mode was the invention of Polymnestes, who also was the first that taught the manner of alternately soft and loud. Olympus, besides that he regulated in a great measure the ancient Greek music, found out and introduced the enarmonic genus, and also the Prosodiac, the Chorian, and the Bacchian measures; all of which it is manifest were of ancient invention. But Lasus Hermionensis* applying these measures to his dithyrambic compositions, and making use of an instrument with many holes, by an addition of tones and hemitones made an absolute innovation in the ancient music. In like manner Menalippides, the lyric poet, Philoxenus, and Timotheus, all forsook the ancient method. The latter, until the time of Terpander, of Antiassa, used a lyre with only seven strings, but afterwards he added to that number. The wind-instruments also received a great alteration; and in general the plainness and simplicity of the ancient music was lost in that affected variety which these and other musicians introduced.

'In ancient times, when Poetry held the precedence of the other arts, the musicians who played on wind-instruments were retained with salaries by the poets, to assist those who taught the actors, till Menalippides appeared, after which that practice ceased.

'Pherecrates, the comic poet, introduces Music in the habit of a woman with her face torn and bruised; and also Justice, the latter of whom, demanding the reason of her appearing in that condition, is thus answered by Music:—†

* Lasus Charbini, from Hermione, a city of Achæa, lived about the 58th Olympiad, in the time of Darius Hystaspes: some reckon him among the seven wise men, in the room of Periander. He was the first who wrote a book concerning music, and brought the dithyrambics into the games and exercises, where he was a judge or moderator, deciding contentious disputations. This Lasus was a musician of great fame, and is mentioned by Plutarch as the first who changed any thing in the ancient music. Melibom. on Aristoxenus, from Suidas.

† This Pherecrates, the comic poet, lived in the time of Alexander the

"It is my part to speak and yours to hear, therefore attend to my complaints. I have suffered much, and have long been oppressed by that beast Menalippides, who dragged me from the fountain of Parnassus, and has tormented me with twelve strings: to complete my miseries, Cinesian, the Athenian, a pretender to poetry, composed such horrid strophes and mangled verses, that I, tortured with the pain of his dithyrambica, was so distorted that you would have sworn that my right side was my left: nor did my misfortunes end here, for Phrynis, in whose brains is a whirlwind, racked me with small wires, from which he produced twelve tiresome harmonies. But him I blame not so much, because he soon repented of his errors, as I do Timotheus, who has thus furrowed my face, and ploughed my cheeks; and Pyrrias, the Milesian, who, as I walked the streets, met me, and with his twelve strings bound and left me helpless on the earth."

"That virtuous manners are in a great measure the effect of a well-grounded musical education, Aristoxenus has made apparent. He mentions Telesias, the Theban, a contemporary of his, who being a youth, had been taught the noblest excellencies of music, and had studied the best Lyric poets, and withal played to perfection on the flute; but being past the prime of his age, he became infatuated with the corrupted music of the theatres, and the innovations of Philoxenus and Timotheus; and when he laboured to compose verses, both in the manner of Pindar and of Philoxenus, he could succeed only in the former, and this proceeded from the truth and exactness of his education; therefore if it be the aim of any one to excel in music, let him imitate the ancients; let him also study the other sciences, and make philosophy his tutor, which will enable him to judge of what is decent and useful in music."

"The genera of music are three, the diatonic, the chromatic, and enarmonic; and it concerns an understanding artist to know which of these three kinds is the most proper for any given subject of poetry."

"In musical instruction the way has sometimes

Great, and attended him, as we are told, in his expeditions, (Suid. in Pherocrates) and was contemporary with Aristophanes, Plato, Eupolis and Phrynichus, all comic writers (Id. in Plato). Phrynis, who played on the lyre, was the son of Cabon (Id. in Phrynica), and scholar of Aristocides, who pretended to be of the family of Terpander, and was a favourite with Hiero, king of Sicily, as some accounts tell us, which would throw him back near one hundred and fifty years in time before our poet Pherocrates: but if we may believe Plutarch, he should have been a contemporary with the poet at least, if he personally contended the music prize with Timotheus, with whose playing we are told Alexander's spirit was so raised and animated to war. (Suid. in Timotheus.) But may it not be said that Timotheus did contend the prize against some piece formerly composed by Phrynis, as the dramatic poets sometimes contested the priority against a play of some deceased poet? If so, Phrynis then might have lived as early as the period mentioned by Suidas.

It is true indeed Plutarch, where he gives us this point of history, does not mention Phrynis by name, but distinguishes him only as the son of Cabon, and by his nickname *ἰονοκαμπτης*, *Ionocampetes*; which sarcastical addition he obtained, because by his effeminate modulations he had corrupted the old music in the like manner as the Ionic movements had debauched the old masculine dances. Jul. Pollux, lib. IV. cap. ix. § 66.

The same Phrynis is likewise rallied by Aristophanes [in *Nubibus*, v. 967] and others of the comic poets, for the levity of his compositions, and for overdoing every thing in his performance. He was marked out, even to infamy, for his innovations in music; for his soft and affected modulations, which were so abhorrent from the simplicity of the ancient music; for his intermingling and confounding the modes; and for debasing the science to parasitism and servile offices.

'been for the tutor first to consider the genius and inclination of the learner, and then to instruct him in such parts of the science as he should discover most affection for; but the more prudent sort, as the Lacedemonians of old, the Mantinæans, and Pellenians, rejected this method.'

Here the discourse of Soterichus grows very obscure, and has a reference to terms of which a modern can entertain no idea. Farther on he resumes the consideration of the genera, which he speaks of to this effect:—

'Now then, there being three genera of harmony, equal in the quantity of systems or intervals, and number of tetrachords, we find not that the ancients disputed about any of them except the enarmonic, and as to that they differed only about the interval called the diapason.'

The speaker, by whom all this while we are to understand Soterichus, then proceeds to shew that a mere musician is an incompetent judge of music in general; and to this purpose he asserts that Pythagoras rejected the judgment of music by the senses, and maintained that the whole system was included in the diapason. He adds, that the later musicians had totally exploded the most noble of the modes; that they made hardly the least account of the enarmonic intervals, and were grown so ignorant as to believe that the enarmonic diesis did not fall within the apprehension of sense.

He then enumerates the advantages that accrue from the use of music, and cites Homer to prove its effects on Achilles in the height of his fury against Agamemnon: he speaks also of a sedition among the Lacedemonians, which Terpander appeased by the power of his music; and a pestilence among the same people, which Thales, the Cretan, stopped by the same means.

Onesicrates, who hitherto appears to have acted the part of a moderator in this colloquy, after bestowing his commendations both on Lysias and Soterichus, addresses them in these terms:—

'But for all this, my most honoured friends, you seem to have forgotten the chief of all music. Pythagoras, Archytas, Plato, and many others of the ancient philosophers maintain that there could be no motion of the spheres without music, since that the supreme Deity constituted all things harmoniously; but now it would be unreasonable to enter upon a discourse on that subject.'

And so singing a hymn to the Gods and the Muses, Onesicrates dismisses the company.

Thus ends the Dialogue of Plutarch on music, which, though a celebrated work of antiquity, is in the judgment of some persons rendered still more valuable by the passage from Pherocrates, which he has introduced into it. The least that can be said of which is, that without a comment it is next to impossible to understand it: the following remarks, which were communicated to the late Dr. Pepusch by a learned but anonymous correspondent of his, may go near to render it in some degree intelligible:—

'The poet, speaking of the successive abuses of music, mentions first Phrynis, and afterwards Timo-

'theus; so that Phrynis should seem to have led the way to the abuses which Timotheus is reprehended for, or rather gave into, to the prejudice of music; and it is probable he did so, from a speech of Agis made to Leonidas, which is transmitted to us by Plutarch in the life of Agis.

'What we want the explanation of, is that passage of Pherecrates which relates to the five strings and the twelve harmonies.

'From the time of Terpander, and upwards, we know that the lyre had seven strings, and those adjusted to the number of the seven planets, and as some suppose to their motions also. For though Euphoriion in Athenæus is made to say, that the use of the instruments with many strings was of very great antiquity, yet the lyre was reckoned complete, and to have attained the full measure of perfect harmony when it had seven strings; because, as Aristotle observed, the harmonies consisted in the number of chords, and because that was the number of old used.

'And therefore when Timotheus added four strings to the former seven, that innovation was so offensive to the Lacedæmonians, that he was formally prosecuted for the presumption; and it was one of the causes for which they were said to have banished him their state. The edict by which they did so, still extant, is transmitted to us as a curiosity by Boetius; * some however have said that Timotheus cleared himself from this sentence by producing a very ancient statue of Apollo found at Lacedæmon, holding a lyre with nine strings.† But if he avoided this sentence of banishment, he did not wholly escape censure; for Pausanias, who wrote as early as Athenæus, tells us where the Lacedæmonians hung up his lyre publicly, having punished him for superadding four strings, in compositions for that instrument, to the ancient seven; and Plutarch likewise tells us that before this, when the above-mentioned Phrynis was playing on the lyre at some public solemnity, one of the Ephori, Ecprepes by name, taking up a knife, asked him on which side he should cut off the strings that exceeded the number of nine.‡

'But though these innovations of Timotheus were

* Boetius, in his treatise De Musica, Lib. I. cap. i. has given it in the original Greek; and the author of a book lately published, entitled Principles and Power of Harmony, has given the following translation of it:—

Whereas Timotheus, the Milesian, coming to our city, has deformed the ancient music; and laying aside the use of the seven-stringed lyre, and introducing a multiplicity of notes, endeavours to corrupt the ears of our youth by means of these his novel and complicated concerts, which he calls chromatic, by him employed in the room of our established, orderly, and simple music; and whereas, &c. It therefore seemeth good to us the King and Ephori, after having cut off the superfluous strings of his lyre, and leaving only seven thereon, to banish the said Timotheus out of our dominions, that every one beholding the wholesome severity of this city, may be deterred from bringing in amongst us any unbecoming customs, &c. *Infra* page 118.

† Casaub. ad Athenæum, lib. VIII. cap. xi.

‡ This fact is alluded to by Agis king of Sparta, in a speech of his to Leonidas, thus recorded by Plutarch:—

'And you that use to praise Ecprepes, who being Ephore, cut off two of the nine strings from the instrument of Phrynis the musician, and to commend those who did afterwards imitate him in cutting the strings of Timotheus's harp, with what face can you blame me for designing to cut off superfluity and luxury from the commonwealth? Do you think those men were so concerned only about a fiddle-string, or intended any thing else than by checking the voluptuousness of music, to keep out a way of living which might destroy the harmony of the city? Plutarch in Vita Agidis.'

'said to be so offensive to the Lacedæmonians, it was not the first time of their having been put in practice; for Phrynis had before done the like, and been punished, as we shall find, in the same manner.

'These accounts therefore go thus far towards an explanation of one part of the passage before us; that as to the five strings, we may be pretty certain that the lyre of Phrynis was not confined to that number, nay we have particular testimonies that Phrynis himself was noted for playing on the lyre with more than seven strings; the system of the lyre, from the time of Terpander to that of Phrynis, had continued altogether simple and plain, but Phrynis beginning to subvert this simplicity by adding two strings to his instrument, we are told by Plutarch, in more than one passage, that Ecprepes the magistrate cut off two of his nine strings. §

'The next thing therefore to be enquired into, is what the poet could mean by playing twelve harmonies on five strings?

'Perhaps by Harmonies we are to understand Modes; and if so, Phrynis may be ridiculed for such a volubility of hand, and such an affectation of variety, that he extracted a dozen tones from five strings only, or that he played over the whole twelve modes within that compass. For besides the seven principal modes, it is said that Aristoxenus by converting five species of the diapason, introduced five other secondary modes; and that the intermingling of the modes is the sense of ἀμυγία here, seems plain from another passage in Plutarch, || where he says, "That it was not allowed to compose for the lyre formerly, as in his time, nor to intermingle the modes ἀμυγία and measures of time, for they observed one and the same cast peculiar to each distinct mode, which had therefore a name to distinguish it by; they were called Νομοί or rules and limitations, because the composers might not transgress or alter the form of time and measure appointed to each one in particular."

'For we are certain that both the Athenians and Lacedæmonians had their laws by which the particular species of music were designed to be preserved distinct and unconfused; and their hymns, threni, pæans, and dithyrambs kept each to their several sort of ode; and so the composers for the lyre were not permitted to blend one melody with another, but they who transgressed were censured and fined for it.'

It has already been mentioned that the genuineness of this dialogue has been questioned, some writers affirming it to be a spurious production, and others contending it to be a genuine work of Plutarch, worthy of himself, and in merit not inferior to the best of the treatises contained in the Symposiasts. It is therefore necessary to take a view of the controversy, and to state the arguments of the contending parties in support of their several opinions. It seems that the original ground of this dispute was a note prefixed to Amyot's French translation of this dialogue in the following words: 'Ce traité n'appartient

§ Vide the last preceding note, and Plutarch in Laconic. Institutio. || De Musica.

'point, ou bien peu à la musique de plusieurs voix accordées & entrelacées ensemble, qui est aujourd'hui en usage ; ains à la façon ancienne, qui consistoit en la convenance du chant avec le sens & la mesure de la lettre, & la bonne grace du geste ; & le style ne semble point être de Plutarque.'

Amyot's translation bears date in 1610 ; notwithstanding which, Fabricius, in his catalogue of the writings of Plutarch, has mentioned this discourse without suggesting the least doubt of its authenticity.* But a dispute having arisen in the French Academy of Inscriptions and Belles Lettres, on the question, whether the ancients were acquainted with music in consonance or not, this tract of Plutarch, in which there is not the slightest mention of any such practice, was urged in proof that they were strangers to it. While a doubt remained of the genuineness of this discourse, its authority could not be deemed conclusive ; those who maintained the affirmative of the principal question, therefore insisted on the objection raised by Amyot ; and this produced an enquiry into the ground of it, or, in other words, whether Plutarch was really the author of that discourse on music which is generally ascribed to him, or not : this enquiry is contained in three papers written by Monsieur Burette, and inserted in the *Memoirs of the above-mentioned Academy*, tome onzieme, Amst. 1736, with the following titles, *Examen du Traité de Plutarque sur la Musique—Observations touchant l'Histoire littéraire du Dialogue De Plutarque sur la Musique—Analyse du Dialogue de Plutarque sur la Musique*, the publication whereof has put an end to a question, which but for Amyot had probably never been started.

Meibomius, in the general preface to his edition of the musical writers, and Doni, are lavish in their commendations of this treatise : the latter of them, in his discourse *De Præstantia Musicæ Veteris*, pag. 65, calls it a golden little work ; but whether it merits such an encomium must be left to the judgment of such as can truly say they understand it. As to the historical part, it is undoubtedly curious, except in some instances, that seem to approach too near that species of history which we term fabulous, to merit any great share of attention ; but as to that other wherein the author professes to explain the nature of the ancient music, it is to be feared he is much too obscure for modern comprehension. The particulars most worthy of observation in this work of Plutarch are, the perpetual propensity to innovation, which the musicians in all ages seem to have discovered, and the extreme rigour with which those in authority have endeavoured to guard against such innovations : the famous decree of the Ephori against Timotheus just mentioned, which some how or other was recovered by Boetius, and is inserted in a preceding note,† is a proof that the state thought itself concerned in preserving the integrity of the ancient music ; and if it had so great an influence over the manners of the Spartan youth, as in the above treatise

is suggested, it was doubtless an object worthy of their attention.

CHAP. XVIII.

ARISTIDES QUINTILIANUS is supposed to have flourished, A. C. 110. This is certain, that he wrote after Cicero, for from his books *De Republica* he has abridged all the arguments that Cicero had advanced against music, and has opposed them to what he urged in behalf of it in his oration for Roscius. It is farther clear that Aristides must have been prior to Ptolemy, for he speaks of Aristoxenus who admitted of thirteen modes, and of those who after him allowed of fifteen, but he takes no notice of Ptolemy who restrained the number of them to seven. His treatise *De Musica* consists of three books. The first contains an ample discussion of the doctrine of the modes : speaking of the diagram by which the situation and relation of them is explained, he says it may be delineated in the form of wings, to manifest the difference of the tones among themselves ; but he has given no representation of it.

All that has been hitherto said of the modes is to be understood of melody, for there is another and to us a more intelligible sense of the word, namely that, where it is applied to the proportions of time, or the succession and different duration of sounds, of which whether they are melodious, or such as arise from the simple percussion of bodies, the modes of time, for by that appellation we choose to distinguish them from the modes of tone, are as so many different measures. The effect of the various metrical combinations of sounds is undoubtedly what the ancients, more particularly this author, meant by the word *Rythmus*. Of time he says there are two kinds, the one simple and indivisible, resembling a point in geometry ; the other composite, and that of different measures, namely, duple, treble, and quadruple.‡ The rhythmic genera he makes to be three in number, namely, the equal, the sesquialteral, and the duple ; others he says add the supertertian : these are constituted from the magnitude of the times ; for one compared to itself begets a ratio of equality, two to one is duple, three to two is sesquialteral, and four to three supertertian : He speaks of the elation and position of some part of the body, the hand or foot perhaps, as necessary to the *rythmus*, probably as a measure ; and this corresponds with the practice of the moderns in the measuring of time by the *tactus* or beat. The remainder of the first book of this work of Quintilian contains a very laborious investigation of measures, with all their various inflexions and combinations, in which the author discovers a profound knowledge.

The second book treats of music as a means to

‡ This passage in Aristides Quintilianus has drawn on him a severe censure from the late Dr. Pemberton, the Gresham professor of physic, who says that he here endeavours to make out four different measures of time in verse also. This, says the Dr., is talking nonsense. But, adds he, this writer is apt to amuse himself with fanciful resemblances ; and having first imagined I know not what analogy between these four measures of time, and the four diæses, into which a tone was considered as divisible, he must needs try at making out the like in relation to words. *Observations on Poetry especially the Epic*. Lond. 1738. page 110.

* Biblioth. Græc. lib IV. cap. xl. pag. 364. N. 124.

† A translation on page 80, the original infra 118.

regulate the external behaviour, as that of philosophy is to improve the mind. Music, he says, by its harmony polishes the manners, and its rhythm renders the body more agreeable; for youth being impatient of mere admonition, and capable of instruction by words alone, require such a discipline as without disturbing the rational part of their natures shall familiarly and by degrees instruct them: he adds that it is easily perceived that all boys are prompt to sing and ready for brisk motions, and that it is not in the power of their governors to hinder them from the pleasure which they take in exercises of this sort. In human things, continues this author, there is no action performed without music; it is certain that divine worship is rendered more solemn by it, particular feasts and public conventions of cities rejoice with it, wars and voyages are excited by it, the most difficult and laborious works are rendered easy and delightful by it, and we are excited to the use of music by divers causes. Nor are its effects confined to the human species; irrational animals are affected by it, as is plain from the use which is made of pipes by shepherds, and horns by goatherds. Of the use of music in war, as practised by the ancients, he has the following passage:—'Numa has said, that by music he corrected and refined the manners of the people, which before were rough and fierce: to that end he used it at feasts and sacrifices. In the wars where it is and will be used, is there any need to say how the Pyrrhic music is a help to martial discipline? certainly it is plain to every one, and that to issue commands by words in time of action would introduce great confusion, and might be dangerous by their being made known to the enemies, if they were such as use the same language. To the trumpet, that martial instrument, a particular cantus or melody is appropriated, which varies according to the occasion of sounding it, so as for the attack by the van or either wing, or for a retreat, or whether to form in this or that particular figure, a different cantus is requisite; and all this is so skilfully contrived, as to be unintelligible to the enemy, though at the same time by the army it is plainly understood.'

Thus much of this author is intelligible enough to a reader of this time; but when he speaks, as he does immediately after, of the efficacy of music in quieting tumults and appeasing an incensed multitude, it must be owned his reasoning is not so clear: as little can we conceive any power in music over the irascent and concupiscent affections of the mind, which he asserts are absolutely under its dominion. The remainder of this second book consists of a chain of very abstruse reasoning on the nature of the human soul, no way applicable to any conception that we at this time are able to form of music, and much too refined to admit of a place in a work, in which it is proposed not to teach, but to deliver a history of, the science.

The third book contains a relation of some experiments made with strings, distended by weights in given proportions, for finding out the ratios of con-

sonances; a method which this author seems to approve; and to recommend this practice, he cites the authority of Pythagoras, who he says, when he departed this life, exhorted his disciples to strike the monochord, and thereby rather inform their understandings than trust to their ears in the measure of intervals. He speaks also of an instrument for the demonstration of the consonances, called a helicon, which was of a square form, and on which were stretched, with an equal tension, four strings.* For the reason above given, it seems no way necessary to follow this author through that series of geometrical reasoning, which he has applied for the investigation of his subject in the succeeding pages of his book, wherefore a passage relating to the tetrachords, remarkable enough in its kind, shall conclude this extract from his very learned but abstruse work. 'The tetrachords are agreed to be five in number, and each has a relation to one or other of the senses; the tetrachord hypaton resembles the touch, which is affected in new-born infants, when they are impelled by the cold to cry. The tetrachord meson is like the taste, which is necessary to the preservation of life, and hath a similitude to the touch. The third, called synemmenon, is compared to the smell, because this sense is allied to the taste; and many, as the sons of art say, have been restored to life by odours. The fourth tetrachord, termed diezeugmenon, is compared to the hearing, because the ears are so remote from the other organs of sense, and are disjoined from each other. The tetrachord hyperboleon is like the sight, as it is the most acute of the systems, as the sight is of the senses.' Farther, this author tells us that 'the five tetrachords do in like manner answer to the five primary elements, that is to say, hypaton to the earth, as the most grave; meson to the water, as nearest the earth; synemmenon to the air, which passes through the water remaining in the profundities of the sea and the caverns of the earth, and is necessary for the respiration of animals, which could not live without it; diezeugmenon to the fire, the motion whereof, as tending upwards, is against nature; lastly, the tetrachord hyperboleon answers to the æther, as being supreme and above the rest.' There are, he says, also analogies between the three several systems of diapente and the senses; but we hasten to dismiss this fanciful doctrine. Moreover, adds he, 'in discoursing of the human soul, systems are not improperly compared to the virtues. Hypaton and meson are to be attributed to temperance, the efficacy whereof is double, and consists in an abstinence from unlawful pleasures, resembling the most grave of these two systems; as also in a moderate use of lawful enjoyments, not improperly signified by the tetrachord meson; but the tetrachord synemmenon is to be attributed to justice, which being joined with temperance, exerts itself in the discharge of public duties, and in acts of private beneficence: the diezeugmenon has the resemblance of fortitude, which virtue delivers the soul from the dominion of the body; lastly, the

* See it in a subsequent chapter of this second book.

'hyperboleon emulates the nature of prudence, for that tetrachord is the end of the acumen, and this virtue is the extremity of goodness. Again, these virtues may be assimilated to the three systems of diapente; * the two first, justice and temperance, which are always placed together as being a check to the concupiscent part of the mind, resemble the first of these systems; fortitude may be compared to the second, as that virtue denotes the irascible part and refers to each of our two natures; and prudence to the third, as declaring the rational essence. Add to this, that the two species of diapason answer to the twofold division of the mind; the first resembling the irrational, and the second the rational part thereof.'

It has been remarked of Quintilian that he is extremely fond of analogies, vide pag. 81, in a note; and the above passages are a proof that this charge against him is not ill-grounded.

ALYPPIUS, the next in succession of the authors now remaining to him above cited, or, as some suppose, a contemporary of his, as flourishing about A.C. 115,† compiled a work, entitled an Introduction to Music, which seems to be little else than a set of tables explaining the order of the sounds as they arise in the several modes of their respective genera in the ancient method of notation. The musical characters used by the ancients were arbitrary; they were nothing more than the Greek capitals mutilated, inverted, and variously contorted, and are estimated at no fewer than twelve hundred and forty. A specimen of them is herein-before inserted in two plates from Kircher. (Appendix, Nos. 35 and 36.)

MANUEL BRYENNIIUS, another of the Greek writers on music, is supposed to have flourished under the elder Palæologus, viz., about the year of Christ 120. He wrote three books on harmonics, the first whereof is a kind of commentary on Euclid, as the second and third are on Ptolemy.‡ He professes to have studied perspicuity for the sake of young men, but has given very little more than is to be found in one or other of the above authors. Meibomius had given the public expectations of a translation of this work, but not living to complete it, Dr. Wallis undertook it, and it now makes a part of the third volume of his works, published at Oxford in three volumes in folio, 1699.

BACCHIUS SENIOR was a follower of Aristoxenus; Fabricius supposes him to have been tutor to the emperor Marcus Antoninus, and consequently to have lived about A.C. 140.§ He wrote in Greek a very short introduction to music in dialogue, which, with a Latin translation thereof, Meibomius has published. It seems it was first published in the original by Mersennus, in his Commentary on the six first chapters of Genesis; and that afterwards he published a translation of it in French, which Meibomius, in the preface to his edition of the ancient musical authors, censures as being grossly erroneous.

* The varieties or different systems of diapente are four, and therefore it may be questioned why in this place the author has limited them to three.

† Fabr. Biblioth. Græc. lib. III. cap. x.

‡ Ibid.

§ Ibid.

GAUDENTIUS, the philosopher, according to Fabricius,|| seems to have written before Ptolemy, and treading in the steps of Aristoxenus, composed an introduction to harmonics, which Cassiodorus commends as an elegant little work; though he does not pretend to say who he was, or where he lived; however upon his authority Cassiodorus relates that Pythagoras found out the original precepts of the art by the sound of hammers and the percussion of extended chords; and indeed as to this matter Gaudentius is very explicit. For his work in general, excepting a few definitions and a representation of the musical characters in the method of Alypius, it is little more than an abridgement of Aristoxenus, and that so very short and obscure, that little advantage can be derived from the perusal of it.

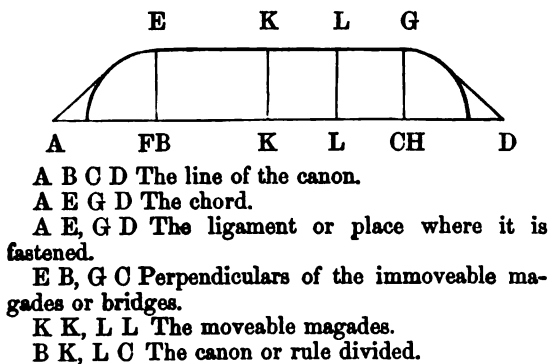
CLAUDIUS PTOLEMEUS was an Egyptian, born at Pelusium; not one of the Ptolemies, kings of Egypt, with some one of whom he has been confounded; nor the same with Ptolemy, the mathematician and astronomer, who, as Plutarch relates in his life of Galba, was the constant companion of that emperor, and was also attendant on the emperor Otho, in Spain, and foretold that he should survive Nero, as Tacitus tells us, lib. I. cap. xxii. The Ptolemy here spoken of flourished in the reign of the emperor Marcus Aurelius Antoninus, as Suidas testifies; and also himself in his *Magnæ Syntaxis*, where he says that he drew up his astronomical observations at Alexandria, for which reason he is by Suidas and others called Alexandrinus, in the second year of Antoninus Pius, which answers to the year of Christ 139.¶ He was the author of a treatise on harmonics in three books, a work much more copious than any of those above-mentioned; and it must be allowed that he of all the ancient writers seems to have entered the most deeply into the subject of harmonics. In the first chapter of his first book, he assigns the criteria of harmony, which he makes to be sense and reason: the former of these, he says, finds out what is nearly allied to truth, and approves of what is accurate, as the latter finds out what is accurate and approves of what is nearly allied to truth. Chap. iii. speaking of the causes of acuteness and gravity, he takes occasion to compare the wind-pipe to a flute; and to remark as a subject of wonder, that power or faculty which enables a singer readily and instantaneously to hit such degrees of dilatation and contraction as are necessary to produce sounds, grave or acute, in any given proportion.

In the sixth chapter of the same book he condemns the method of the Pythagoreans, and in the ninth that of the Aristoxeneans, in the adjusting of the consonances, but thinks the former the less erroneous of the two: the Pythagoreans, he says, not sufficiently attending to the ear, often gave harmonic proportions to incongruous sounds; on the contrary, the Aristoxeneans, ascribing all to the ear, applied numbers, the images of reason, not to the differences of sound, but to their intervals. To correct the errors of these two very different methods, he contrived an instru-

|| Biblioth. Græc. lib. III. cap. x.

¶ Ibid. esp. xiv.

ment very simple and inartificial in its construction, but of singular use in the adjusting of ratios, which, though in truth but a monochord, as consisting of one string only, he with great propriety called the Harmonic Canon, by which appellation it is constantly distinguished in the writings of succeeding authors. His description of the instrument and its use, as also the reasons that led him to the invention, are contained in the eighth chapter of the same first book, and are to the following effect:—‘We omit to explain ‘what is proposed, by the means of pipes or flutes, or ‘by weights affixed to strings, because they cannot ‘make the necessary demonstrations with sufficient ‘accuracy, but would rather occasion controversy; ‘for in pipes and flutes, as also in the breath which is ‘injected into them, there is great disorder; and as ‘to strings with weights affixed to them, besides that ‘of a number of such strings, we can hardly be sure ‘that they are exactly equal in size, it is almost impossible to accommodate the ratios of the weights ‘to the sounds intended to be produced by them; ‘for with the same degree of tension two strings of ‘different thickness would produce sounds differently ‘grave or acute: and farther, which is more to the ‘present purpose, a string, at first of an equal length ‘to others, by the affixing to it a greater weight than ‘is affixed to the rest, becomes a longer string, from ‘whence arises another difference of sound besides ‘what might be deduced from the ratio of weight ‘alone. The like will happen in sounds produced ‘from hammers or quoits of unequal weights; and ‘we may observe the same in some vessels that are ‘first empty, and afterwards filled; and certainly it ‘is difficult in all these cases to provide against the ‘diversity of matter and figure in each; but in the ‘canon, as I term it, the chord most readily and ‘accurately demonstrates the ratios of the several ‘consonances:’—

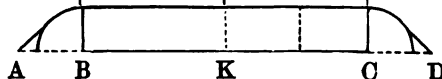


Suppose A B C D to be a right line, at each end thereof apply magades or little bridges, equal in height, and having surfaces as nearly spherical as possible; as suppose the surface B, E to be described round the center F, and the surface C, G round the center H. Let then the points E, G be taken in the middle or bisection of these curved superficies, the magades being so placed as that lines E, F, and G, H, drawn from the said bisections E and G, may be perpendicular to the right line A B, C D. Now

if from the points A D a chord be strained over the middle points E and G of the said curved superficies, the part E G will be parallel to the right line A B, C D, because of the equal height of the magades, and will have its limits at E and G. Transfer then the line E G to the line A B C D, and having first bisected the whole length at K, and the half of that distance at L, place under the chord other magades, which must be very thin, and somewhat higher, but in every other respect like the former, so that both the intermediate magades may be straight with the middle of the external ones; now if the part of the chord E K be found equitonal to K G, and the part K L to L G, then are we convinced that the chord is equable and perfect as to its constitution and make, and consequently fit for the experiment; but if it should not prove so, the trial is to be transferred to another part, or even to a new chord, till we obtain this condition of equability under the circumstances of similar moveable magades, and a similar length and tension of the parts of the chord. This being done and the chord divided according to the proportions of the consonances, we shall by the application of the moveable magades prove by our ears the ratios of corresponding sounds; for giving to the distance E K four of such parts whereof K G is three, the sounds on both sides will produce the consonance diatessaron, and have a sesquitercian ratio; and giving to E K three parts whereof K G is two, the sounds on both sides will make the consonance diapente, which is in sesquialteral ratio. Again, if the whole length be so divided as that E K may be two parts and K G one of them, it shall be the unison diapason, which consists in a duple ratio. If it be so that E K be eight parts whereof K G is three, it will be the consonance diapason and diatessaron, in the ratio of eight to three; farther if it be divided so as that E K be three parts and K G one of them, it will be diapente and diapason, in a triple ratio; and lastly if it be so divided as that E K be four and K G one, it will be the unison diapason in a quadruple ratio.

RATIOS. THE PROOF. CONSONANCES.

$\frac{1}{2}$ E	4	K	1	G	Disdiapason
$\frac{3}{2}$ E	3	K	1	G	Diapason and diapente
$\frac{4}{3}$ E	8	K	3	G	Diapason and diatessaron
$\frac{2}{1}$ E	2	K	1	G	Diapason
$\frac{3}{2}$ E	3	K	2	G	Diapente
$\frac{4}{3}$ E	4	K	3	G	Diatessaron
E	1	K	1	G	



How the monochord of Pythagoras was constructed, or in what manner he divided it, we are

no where told : it seems difficult to conceive that for producing the consonances it could be divided in any other manner than this of Ptolemy, and yet this author censures the followers of Pythagoras for not knowing how to reason about the consonances, which one would think they could not fail to do from principles so clear as those deducible from experiments on the monochord. But as to the Aristoxeneans, he censures them for rejecting the reasonings of the Pythagoreans, at the same time that they would not endeavour to find out better. To understand these and other invectives against this sect, it is to be observed that they measured the intervals by the ear as our practical musicians do now, that is to say, the greater by fourths or fifths, and the less by tones and semitones ; thus to ascertain the measure of an octave, they applied that of a diatessaron or fourth above the unison, and another below the octave, and between the approximating extremities of these two intervals they found the distance of a tone, which furnished a common measure for the less intervals of a fourth, a fifth, and the rest ; and enabled them to say that a tone is the difference between the diatessaron and the diapente : this Ptolemy calls remitting one question to another, and he adds that the ear, when it would judge of a tone needs not the help of a comparison of it with the diatessaron or any other consonance, and yet adds he, 'if we would ask of the Aristoxeneans what is the ratio of a tone, they will say, perhaps, that it is two of those intervals, that is to say, hemitones, of which the diatessaron contains five, and in like manner that the diatessaron is five, of those of which the diapason is twelve, and so of the rest, till at last they come to say that the ratio of a tone is two, which is not defining those ratios.'

Ptolemy, lib. I. cap. x. farther denies the assertion of the Aristoxeneans, that the diatessaron contains two tones and a half, and the diapente three and a half ; as also that the diapason consists of six tones, as the several contents of those two systems of two and a half, and three and a half, supposing this estimation of them to be just, would make undoubtedly six ; but by his division of the monochord, he clearly demonstrates that the term by which the diatessaron exceeds the diatone, and which he calls a limma, is less than a hemitone, in the same proportion as 1944 bears to 2048, a difference however much too small for the ear to distinguish. His demonstration of this proposition is given in a preceding chapter of this work.

To enter into a discussion of that very abstruse subject, the division of the diapason, would require a much more minute investigation of the doctrine of ratios than is requisite in this place ; it must however be observed, that supposing the ear alone to determine the precise limits of any system, that of the diatessaron for example, and that such system were transferred to the monochord, a repetition of the system so transferred would fail to produce a series of systems consonant in the extremities. Thus let a given sound be, as we should now call it G, and let the monochord be divided by a bridge according to

the rules above prescribed, so as to give its fourth C ; and let a tone, D, be set on by another bridge in like manner, and after that another fourth, which would terminate at G, and would seem to make what we should call a diapason : we should find upon taking away the intermediate bridges at C and D, that the interval from G to G would be more than a diapason ; and that were this method of ascertaining the terms of the consonances repeated through a series of octaves, the dissonance would be increased in proportion to the number of repetitions. Ptolemy has taken another method, chap. xi. of this his first book, and by an accumulation of sesquioctave tones has clearly demonstrated that six such exceed the consonance diapason. This deficiency, if it may be so called, in the intervals of which the diapason is compounded, and the difference between tuning by the ear and by numbers, has suggested to mathematicians what is called a temperament, which proposes a certain number of integral parts for the limit of the diapason, and the division of the amount of the several limmas that occur in the progression to it, in such a manner as to make the consonances contained in it as nearly perfect as possible.

The remainder of Ptolemy's first book treats of the genera. Chap. xii. exhibits the division of Aristoxenus, which he condemns ; and chap. xiii. that of Archytas of Tarentum, whom he censures for defining the genera by the interjacent intervals rather than by the ratios of the sounds among themselves, and charges him with rashness and want of thought.

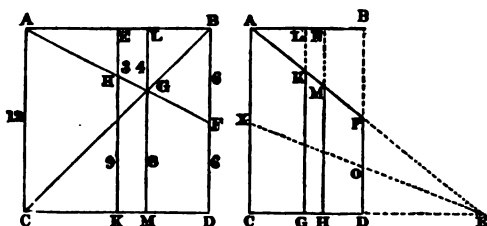
The use and application of the genera is at this day so little understood, that we are greatly at a loss to account for any other division of the tetrachord than that which characterizes the diatonic genus : Nor does it seem possible, with the utmost strength of the imagination, to conceive how a series of sounds so extremely ungrateful to the ear as those of which the chromatic and enarmonic genera are said to be formed, could ever be received as music in the sense in which that word is now understood.

CHAP. XIX.

In the first Chapter of his second book, Ptolemy undertakes to shew by what means the ratios of the several genera may be received by the sense, in the course of which demonstration he points out the different offices of sense, or the ear, and reason, in the admeasurement of intervals, by which it should seem that the former is previously to adjust the consonances, and that these being transferred to the canon, become a subject of calculation ; and this position of his is undoubtedly true ; for the determination of the senses in all subjects where harmony or symmetry are concerned is arbitrary, and it is the business of reason, assisted by numbers, to enquire whether this determination has any foundation in nature or not ; and if it has not, we pronounce it fantastical and capricious ; for example, we perceive by the ear a consonance between the unison and its octave, and we are conscious of the harmony resulting from those two sounds ; but little are we aware of

the wonderful relation that subsists between them, or that if an experiment be made by suspending weights to the chords that produce it, whose lengths are by the laws of harmony required to be in the proportion of 2 to 1, that the shorter would make two vibrations to one of the longer, and that the vibrations would exactly coincide in that relation as long as both chords should continue in motion. Again with respect to the forms of bodies, when we prefer that of a sphere to one less regular, we never attend to the properties of a sphere, but reason will demonstrate a perfection in that figure which is not to be found in an irregular polygon.

In the second chapter of his second book he describes an instrument or diagram called the Helicon, invented as it should seem by himself, for demonstrating the consonances, so simple in its construction that its very figure seems to speak for itself, and to render a verbal explanation, though he has given a very long one of it, unnecessary. It is of this form:—



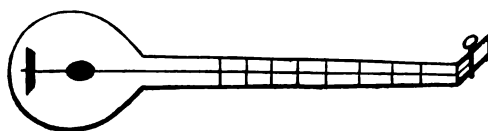
The side of the square AC 12 shews the diapason: the half of BD , that is to say BF or FD 6 the unison. The line GM 8, terminated by the diagonal BC , the diatessaron. The line EK divides the quadrangle equally, and HK 9, terminated by the line AF , shews the diapente. The lines LG and EH are in the ratio of 4 to 3, which is that of the diatessaron; and lastly the lines HK 9 and GM 8 shew the sesquioctave tone.

To this diagram Ptolemy has added another not less easy to be comprehended than the former, in which the lines BD , NH , LG , and AC , are supposed to be chords of equal lengths but bisected by the line AF in the direction AE : this line may be supposed to be a bridge, or subductorium, stopping the four chords at $AKMF$, and thereby giving the proportions 12 9 8 6; which proportions will also result from a subductorium placed in the direction XE , for XC will be duple of OD , and the two intermediate chords sesquialtera and sesquitercia, and with respect to each other, sesquioctave; in all agreeing with the ratios in the former diagram.

In the ninth chapter of book II. Ptolemy takes occasion to say that there are only seven tones or modes, for that there are but seven species of diapason; a position that will be easily granted him by the moderns who suppose the word, tone or mode, when applied to sound, to answer to what we term the key or fundamental note. What he says farther concerning the modes has already been mentioned in a preceding chapter of this book.

Chapter xii. the same author speaks of the monochord; and here he proposes, but not for the purpose

of experiments, a different method of dividing it, not, says he, according to one tone or mode only, but according to all the tones together; by which one would imagine he meant somewhat like a temperament of its imperfections, and a design to render it an instrument not of speculation but practice; and indeed besides exhibiting it in a form more adapted to practice, and more resembling a musical instrument than its primitive one:—*



He speaks, though not very intelligibly, of the manner of performing on it, and recommends, to conceal its defects, the conjunction with it, either of a pipe or the voice. A little after, he speaks of Didymus a musician, who endeavoured to correct this instrument by a different application of the magades; but for the greater imperfections he says Didymus was not able to find out a cure. Towards the close of this second book he exhibits a short scheme of the three genera, according to five musicians, namely, Archytas, Aristoxenus, Eratosthenes, the same Didymus, and himself; and a little farther on, tables of the section of the canon in all the seven modes according to the several genera.

In the third book chap. iv. he speaks in general of the faculty of harmony, and of mathematical reasoning as applied to it; the use whereof he says is to contemplate and adjust the ratios. In the next ensuing chapter he proceeds, in the manner of Quintilian, to state the analogy of music with the affections of the human mind, the system of the universe, and in short with every other subject in which number, proportion, or coincidence are concerned. In the course of this his reasoning, he mentions that Pythagoras advised his disciples at their rising in the morning to use music, whereby that perturbation which is apt to affect the mind at the awakening from sleep, might be prevented, and the mind be reduced to its wonted state of composure: besides which he says, that it seems the Gods themselves are to be invoked with hymns and melody, such as that of flutes or Egyptian trigons, to shew that we invite them to hear and be propitious to our prayers.

Upon a very careful review of this work of Ptolemy, it will appear that the doctrines contained in it, so far as they are capable of being rendered intelligible, are of singular use in the determination of ratios, and his very accurate division of the monochord carries demonstration with it. It was doubtless for this reason that our countryman Dr. Wallis, a man to whom the learned world are under high obligations, undertook the publication of it from a manuscript in the Bodleian library, in the original Greek, with a Latin translation of his own, together with copious notes, and an appendix by way of commentary.

* There is very little doubt but that the instrument here delineated is the pandura of the Arabians, mentioned in a note of Meibomius on a passage in Nicomachus, for among the Arabian and Turkish instruments described by Mersennus are many in this form.

which the Doctor was the better qualified to give, as it abundantly appears, as well by divers other of his writings in the Philosophical Transactions, as the work we are now speaking of, that he was very profoundly skilled in the science of music. How far he is to be depended on when he undertakes to render the ancient modes in modern characters seems very questionable, for were the Doctor's opinion right in that matter, all that controversy which has subsisted for these many centuries, not only touching the specific differences between them, but even as to their number, must necessarily have ended ages ago; whereas, even at this day, the ablest writers on the subject do not hesitate at saying that the doctrine of the modes is absolutely inscrutable; and perhaps it is for this reason only that so many have imagined that with them we have lost the most valuable part of the art; but on the contrary it is worth remarking that the Doctor, though he was perhaps the ablest geometer of his time, and had all the prejudices in favour of the ancients that a man conversant with the best of their writers could be supposed to entertain, never intimates any such matter; nay, so far is he from adjudging a preference to the ancient music over that of the moderns, that he scruples not to ascribe the relations that are given of the effects of the former to the ignorance of mankind in the earlier ages, the want of refinement, the charms of novelty, and other probable causes. Dr. Wallis gave two editions of this work of Ptolemy, the one published in quarto at Oxford in 1682; another, as also the commentary of Porphyry, and a treatise of Manuel Bryennius, makes part of the third volume of his works, published in three volumes in folio, 1699.

CENSORINUS, a most famous grammarian, lived at Rome about A.C. 238,* and wrote a book entitled *De Die Natali*. It was published by Erycius Puteanus, at Louvain, in 1628, who styles it *Doctrinæ rarioris Thesaurus*; and it is by others also much celebrated for the great light it has thrown on learning. It is a very small work, consisting of only twenty-four chapters; the tenth is concerning music; and the subsequent chapters, as far as the thirteenth inclusive, relate to the same subject.

He professes to relate things not known even to musicians themselves. He defines music to be the science of well modulating, and to consist in the voice or sound. He says that sound is emitted at one time graver, at others acuter; that all simple sounds, in what manner soever emitted, are called *phthongoi*; and the difference, whereby one sound is either more grave or more acute than another, is called *diastema*.

The rest of his discourse on music is here given in his own words:—'Many diastemata may be placed in order between the lowest and the highest sound, some whereof are greater, as the tone, and others less, as the hemitone; or a diastemata may consist of two, three, or more tones. To produce concordant effects, sounds are not joined together capriciously, but according to rule. Symphony is a sweet concert of sounds. The simple or primitive symphonies are three, of which the rest consist; the first, having

'a diastemata of two tones, and a hemitone, is called a diatessaron; the second, containing three tones and a hemitone, is called a diapente; the third is the diapason, and consists of the two former, for it is constituted either of six tones, as Aristoxenus and other musicians assert, or of five tones and two hemitones, as Pythagoras and the geometricians say, who demonstrate that two hemitones do not complete the tone; wherefore this interval, improperly called by Plato a hemitone, is truly and properly a diesis or limma.

'But to make it appear that sounds, which are neither sensible to the eyes, nor to the touch or feeling, have measures, I shall relate the wonderful comment of Pythagoras, who, by searching into the secrets of nature, found that the sounds of the musicians agreed to the ratio of numbers; for he distended chords equally thick and equally long, by different weights, these being frequently struck, and their sounds not proving concordant, he changed the weights; and having frequently tried them one after another, he at length discovered that two chords struck together produced a diatessaron; when their weights being compared together, bore the same ratio to each other as three does to four, which the Greeks call *ἐπιτρίτος*, epitritus, and the Latins *supertertium*. He at the same time found that the symphony, which they call diapente, was produced when the weights were in a sesquialtera proportion, namely, that of 2 to 3, which they called hemiolium. But when one of the chords was stretched with a weight duple to that of the other, it sounded a diapason.

'He also tried if these proportions would answer in the tibia, and found that they did; for he prepared four tibiae of equal cavity or bore, but unequal in length; for example, the first was six inches long, the second eight, the third nine, and the fourth twelve; these being blown into, and each compared with the others, he found that the first and second produced the symphony of the diatessaron, the first and third a diapente, and the first and fourth the diapason: but there was the difference between the nature of the chords and that of the tibia, that the tibia became graver in proportion to the increase of their lengths, while the chords became acuter by an additional augmentation of their weights; the proportion however was the same each way.

'These things being explained, though perhaps obscurely, yet as clearly as I was able, I return to shew what Pythagoras thought concerning the number of the days appertaining to the partus. First, he says there are in general two kinds of birth, the one lesser, of seven months, which comes forth from the womb on the two hundred and tenth day after conception; the other greater, of nine months, which is delivered on the two hundred and seventy-fourth day. Censorinus then goes on to relate from Plato that in the work of conception there are four periods, the first of six days, the second of eight, which two numbers are the ratio of the diatessaron; the third of nine, which answers to the diapente, and the

* Fabricius. Biblioth. Lat. tom. I. pag. 537.

fourth, at the end whereof the fœtus is formed, of twelve, answering to the diapason in duple proportion. After this he proceeds to declare the relations of the above numbers in these words :—

'These four numbers, six, eight, nine, and twelve, being added together, make up thirty-five; nor is the number six undeservedly deemed to relate to the birth, for the Greeks call it *τελειος*, teleios, and we perfectum, because its three parts, a sixth, a third, and a half, that is one, two, three, make up itself; but as the first stage in the conception is completed in this number six, so the former number thirty-five being multiplied by this latter six, the product is two hundred and ten, which is the number of days required to mature the first kind of birth. As to the other or greater kind, it is contained under a greater number, namely, seven, as indeed is also the whole of human life, as Solon writes: the practice of the Jews, and the ritual books of the Etruscans, seem likewise to indicate the predominancy of the number seven over the life of man; and Hippocrates, and other physicians, in the diseases of the body account the seventh as a critical day; therefore as the origin of the other birth is six days, so that of this greater birth is seven; and as in the former the members of the infant are formed in thirty-five days, so here it is done in almost forty, and for this reason, forty days are a period very remarkable; for instance, a pregnant woman did not go into the temple till after the fortieth day; after the birth women are indisposed for forty days; infants for the most part are in a morbid state for forty days; these forty days, multiplied by the seven initial ones, make two hundred and eighty, or forty weeks: but because the birth comes forth on the first day of the fortieth week, six days are to be subtracted, which reduces the number of days to two hundred and seventy-four, which number very exactly corresponds to the quadrangular aspect of the Chal-deans; for as the sun passes through the zodiac in three hundred and sixty-five days and some hours; if the fourth part of this number, namely, ninety-one days and some hours, be deducted therefrom, the remainder will be somewhat short of two hundred and seventy-five days, by which time the sun will arrive at that place where the quadrature has an aspect to the beginning of conception. But let no man wonder how the human mind is able to discover the secrets of human nature in this respect, for the frequent experience of physicians enables them to do it.

'It is not to be doubted but that music has an effect on our birth; for whether it consists in the voice or sound only, as Socrates asserts, or, as Aristoxenus says, in the voice and the motion of the body, or of both these and the emotion of the mind, as Theophrastus thinks, it has certainly somewhat in it of divine, and has a great influence on the mind. If it had not been grateful to the immortal Gods, scenical games would never have been instituted to appease them; neither would the tibia accompany our supplications in the holy

'temples. Triumphs would not have been celebrated with the tibia; the cithara or lyre would not have been attributed to Apollo, nor the tibia, nor the rest of that kind of instruments to the Muses; neither would it have been permitted to those who play on the tibia, by whom the deities are appeased, to exhibit public shows or plays, and to eat in the Capitol, or during the lesser Quinquatria,* that is on the ides of June; to range about the city, drunk, and disguised in what garments they pleased. Human minds, and those that are divine, though Epicurus cries out against it, acknowledge their nature by songs. Lastly, symphony is made use of by the commanders of ships to encourage the sailors, and enable them to bear up under the labours and dangers of a voyage; and while the legions are engaged in battle the fear of death is dispelled by the trumpet; wherefore Pythagoras, that he might imbue his soul with its own divinity, before he went to sleep and after he awaked was accustomed, as is reported, to sing to the cithara; and Asclepiades the physician relieved the disturbed minds of frenetics by symphony. Etophilus, a physician also, says that the pulses of the veins are moved by musical rhythm; so that both the body and the mind are subject to the power of harmony, and doubtless music is not a stranger at our birth.

'To these things we may add what Pythagoras taught, namely, that this whole world was constructed according to musical ratio, and that the seven planets which move between the heavens and the earth, and predominate at the birth of mortals, have a rythmical motion and distances adapted to musical intervals, and emit sounds, every one different in proportion to its height, which sounds are so concordant as to produce a most sweet melody, though inaudible to us by reason of the greatness of the sounds, which the narrow passages of our ears are not capable of admitting.' Then follows the passage declaring the Pythagorean estimate of the distances of the planets and their supposed harmonical ratio, herein-before cited from him.†

Censorinus concludes his Discourse on Music with saying that Pythagoras compared many other things which musicians treat of to the other stars, and demonstrated that the whole world is constituted in harmony. Agreeably to this he says Dorylaus writes that this world is the instrument of God: and others, that as there are seven wandering planets, which have regular motions, they may fitly be resembled to a dance.‡

* A feast in honour of Minerva.

† See it in page 65, with a diagram.

1 The general opinion of the learned in former ages, touching the harmony of the spheres, has been mentioned in a preceding page, but there appears a disposition in the modern philosophers to revive the notion. It seems that Dr. Gregory thought it well founded; and Mr. Maclaurin, in conformity with his opinion, Phil. Discov. of Newton, pag. 35, explains it thus:—'If we should suppose musical chords extended from the sun to each planet; that all these chords might become unison, it would be requisite to encrease or diminish their tensions in the same proportions as would be sufficient to render the gravities of the planets equal; and from the similitude of these proportions the celebrated doctrine of the harmony of the spheres is supposed to have been derived.'

The author of a book lately published, entitled Principles and Powers of Harmony, has added his suffrage in support of the opinion. 'Certain

PORPHYRIUS, a very learned Greek philosopher, of the Platonic sect, and who wrote a commentary on the Harmonics of Ptolemy, lived about the end of the third century. His preceptors in philosophy were Plotinus and Amolius; he was a bitter enemy to the Christian religion, which perhaps is the reason why St. Jerome will have him to be a Jew; but Eunapius affirms that he was a native of Tyre, and that his true name was Malchus, which in the Syrian language signifies a king; and that Longinus the Sophist, who taught him rhetoric, gave him the name of Porphyrius, in allusion to the purple usually worn by kings. Besides the commentary on Ptolemy he wrote the lives of divers philosophers, of which only a fragment, containing the life of Pythagoras, is now remaining; a treatise of abstinence from flesh, an explication of the categories of Aristotle, and a treatise, containing fifteen books, against the Christian religion, which he once professed, as St. Augustine, Socrates, and others assert: this latter was answered by Methodius, bishop of Tyre, and afterwards by Eusebius. He died about the end of the reign of Dioclesian, and in 388 his books were burned.

With regard to his commentary, it is evidently imperfect; for whereas the treatise of Ptolemy, is divided into three books, the second whereof contains fifteen chapters, Porphyry's commentary is continued no farther than to the end of chapter seven of that book, concluding with the series of sounds through each of the three genera. He seems to have been a virulent opposer of the Aristoxeneans, and like his author adheres in general to the tenets of Pythagoras. Porphyry has given a description of the harmonic canon much more intelligible than that of Ptolemy, and has delineated it in the following form:—



By which it appears that a chord A D, strained over the immovable magades B and C, which are nothing more than two parallelograms, with a semi-circular arch at the top of each, together with a moveable bridge of the same form E, but somewhat higher, will be sufficient for the demonstration of the consonances, and this indeed is the representation which Dr. Wallis in his notes on Ptolemy has thought proper to give of it.

Dr. Wallis has contented himself with publishing a bare version of this author, without the addition of

'says he, as this harmonic coincidence is now become, till Sir Isaac Newton demonstrated the laws of gravitation in relation to the planets, it must have passed for the dream of an Utopian philosopher.' Pag. 146. The same author, pag. 145, agreeably to what Censorinus above asserts, says that 'there are traces of the harmonic principle scattered up and down, sufficient to make us look on it as one of the great and reigning principles of the inanimate world.' Some of these have hereinbefore been pointed out. Vide pag. 65, in note. To the instances there mentioned, the following may not improperly be added. The web of a spider formed of threads is of an hexangular figure, and each of the threads that divide the whole into six triangles, may be considered as a beam intended to give firmness and stability to the fabric; from one to the other of these beams the insect conducts lines in a parallel direction, which, supposing them to be ten in number, do, in consequence of their different lengths, constitute a perfect decachord. Kircher, who made this discovery, says, that were these lines or chords capable of sustaining a force sufficient to make them vibrate. It must necessarily follow from the ratios of their lengths, that between the sound of the outer and the innermost, the interval would be a diapason and semitone; and that the rest of the chords, in proportion to their lengths, would produce the other consonances. Musurg. tom. I. pag. 441.

notes, except a few such short ones as he thought necessary to correct a vicious reading, or explain a difficult passage.

The works of the several authors above-named declare very fully the ancient Greek theory; their practice may in a great measure be judged of from the forms of the ancient instruments, and of these it may be thought necessary in this place to give some account.

The general division of musical instruments is into three classes, the pulsatile, tensile, and inflatile; and to this purpose Cardinal Bellarmine, in his Exposition of the CLth psalm, verse 3, says: 'Tria sunt instrumentorum genera, vox, flatus, et pulsus; omnium meminit hoc loco propheta.'

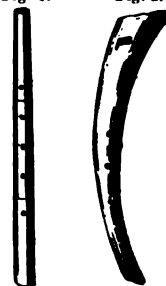
Of the first are the drum, the sistrum, and bells. Of the second, the lute, the harp, the clavicymbalum, and viols of all kinds. Of the third are the trumpet, flutes, and pipes, whether single or collected together, as in the organ.

And Kircher, in his Musurgia, preface to book VI., has this passage:—'Omnia instrumenta musica ad tria genera, ut plurimum revocantur: Prioris generis dicuntur *εγγχορδα* sive *ενταρά*, quæ nervis, seu chordis constant quæque plectris, aut digitis in harmonicis motus incitantur, ut sunt Testudines, Psalteria, Lyrae, Sambucæ, Pandoræ, Barbita, Nablia, Pectides, Clavicymbala, aliaque hujus generis innumera. Secundi generis sunt *εμφυσώμενα*, *ωνευματικά*, vel *εμπνεύσα*, quæ inflata, seu spiritu, incitata sonum edunt ut Fistulæ, Tibiæ, Cornua, Litni, Tubæ, Buccinæ, Classica. Tertii generis sunt *κρούσα*, sive pulsabilia uti sunt Tympana, Sistra, Cymbala, Campanæ, &c.'

This division is adopted by a late writer, Franciscus Blanchinus of Verona, in a very learned and curious dissertation on the musical instruments of the ancients;* which upon the authority of ancient medals, intaglias, bass-reliefs, and other sculptures of great antiquity, exhibits the forms of a great variety of musical instruments in use among the ancient Greeks and Romans, many whereof are mentioned, or alluded to, by the Latin poets, in such terms as contain little less than a precise designation of their respective forms. He has deviated a little from the order prescribed by the above division of musical instruments into classes, by beginning with the inflatile species instead of the tensile; nevertheless his dissertation is very curious and satisfactory, and contains in it a detail to the fol- Fig. 1.

lowing effect:— One of the most simple musical instruments of the ancients is the Calamus pastoralis, made of an oaten reed; it is mentioned by Virgil and many others of the Latin poets, and by Martianus Capella. See the form of it fig. 1.

Other writers mention an instrument of very great antiquity by the name of Ossea tibia, a pipe made of the leg-bone of a crane. Fig. 2.



* De tribus Generibus Instrumentorum Musicæ veterum Organicæ, Dissertatio; Romæ, 1742.

The Syringa or pipe of Pan is described by Virgil, and the use of it by Lucretius, lib. V.

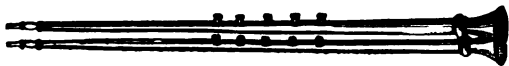
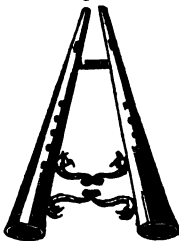
Et supra calamos unco percurrere labro.
The figure of it occurs so frequently on medals, that a particular description of it is unnecessary. Fig. 3.

The Tibiæ pares, mentioned by Terence to have been played on, the one with the right, and the other with the left hand, are diversely represented in Mersennus De Instrumentis harmonicis, pag. 7, and in the Dissertation of Blanchinus now citing; in the former they are yoked together towards the bottom, and at the top, as fig. 4. In the latter they are much slenderer, and are not joined. Fig. 5.*

Fig. 3.



Fig. 4.



The author last mentioned speaks also of other pipes, namely, the Tibiæ bifores, fig. 6, the Tibiæ gemine, fig. 7, instruments used in theatrical representations; the latter of these seem to be the Tibiæ impares of Terence: he also describes the Tibiæ utriculariæ, or bag-pipes, fig. 8, anciently the entertainment of shepherds and other rustics.

The Horn, fig. 9, was anciently used at funeral solemnities; it is alluded to by Statius. Theb. lib. VI.

Fig. 6.

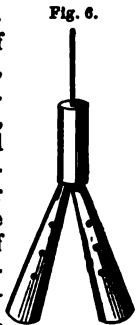


Fig. 7.



Fig. 9.



* The tibiæ of the ancients, and especially those mentioned in the titles of Terence's comedies, have been the subject of much learned enquiry. Caspar Bartholinus the anatomist has written a whole volume De Tibia Veterum. Ælius Donatus, a Latin grammarian, and the preceptor of St. Jerome, says that the tone of the tibiæ dextræ was grave, and adapted to the serious parts of the comedy; and that that of the tibiæ sinistræ, and also of the tibiæ sarranæ, or Tyrian pipes, was light and cheerful. 'Dextræ tibiæ sua gravitate seriæ comedie dictionem pronuntiabant. Sinistræ et sarranæ hoc est Tyriæ acuminis suavitatem jocum in comedia ostendebant. Ubi autem dextrâ et sinistrâ acta fabula inscribatur mistim jocos et gravitatem denunciabat.' Donat. Fragm. de Traged. & Comed. The abbé du Bos says that this passage explains that other in Pliny, where it is said that the ancients to make left-handed pipes, took the bottom of that very reed, the top whereof they had before used for the right-handed. The sense of this passage is manifest; but it does not strictly agree with what Donatus says, unless it can be supposed that, contrary to the order of nature, the reeds were small at bottom, and grew tapering upwards.

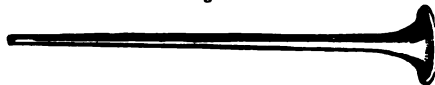
The ancient Buccina or horn-trumpet, fig. 10, is mentioned by Ovid, Vegetius, Macrobius, and others.

Fig. 10.



The Tuba communis, seu recta, so called in contradistinction to the Tuba ductilis, is of very ancient original; it was formerly, as now, made of silver or brass, of the form fig. 11. Blanchinus hesitates not to

Fig. 11.



assert that the two trumpets of silver which God commanded Moses to make in the wilderness were of this form.† It seems that the trumpet has retained this figure without the least external diversity, so low down as the year 1520; for in a very curious picture at Windsor, supposed to be of Mabuse, representing the interview between Andres and Guianes, of Henry VIII. and Francis I. are trumpets precisely corresponding in figure with the Tuba recta above referred to.

Of the instruments of the second class, comprehending the tensile species, the Monochord is the most simple. This instrument is mentioned by Aristides Quintilianus, and other ancient writers, but we have no authentic designation of it prior to the time of Ptolemy, it nevertheless is capable of so many forms, that any instrument of one string only answers to the name; for which reason some have not scrupled to represent the monochord like the bow of Diana.

Figures 12 and 13, are the Lyre of three and four chords, ascribed to Mercury, by Nicomachus, Macrobius, Boetius, and a number of other writers, the forms whereof are here given from ancient sculptures in and about Rome, referred to by Blanchinus; as are also those figures 14 and 15, representing the one a Lyre with seven chords, and the other one with nine.

Fig. 12.



Fig. 13.



Fig. 14.



Fig. 15.



† 'Make thee two trumpets of silver; of a whole piece shalt thou make them, that thou mayest use them for the calling of the assembly, and for the journeying of the camps. Numbers, chap. x. verse 2.

Fig. 16 is the Lyre of Amphion, and 17 the plectrum, with which not only this, but every species

Fig. 16. Fig. 17.

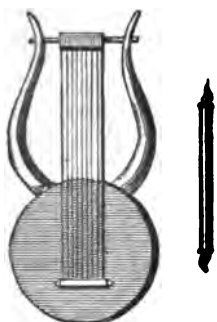


Fig. 18.



of the lyre was struck, as may be collected from the following passage in Ovid :—

Instructamque fidem gemmis et dentibus Indis
Sustinet à levâ : tenuit manus altera plectrum.
Artificis status ipse fuit, tum stamina docto
Pollice sollicitat : quorum dulcedine captus
Pana jubet Tmolus cithæræ submittere cannus.

Met. lib. xi. l. 167.*

Figures 19 and 20 are other forms of the Lyre in a state of improvement.

Fig. 19.

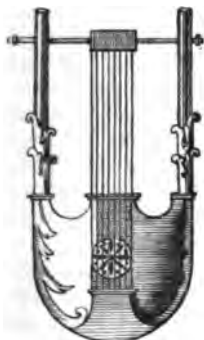
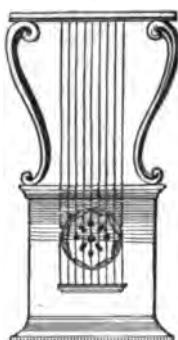


Fig. 20.



* It is very probable that the use of the bow, with which the viol species of instruments is sounded, was borrowed from a practice of the ancients. Of the many kinds of lyre among them, it seems that they had one, in which the fingers of one hand were employed in stopping the strings, at the instant that they were stricken with a stick held in the other.

Virgil intimates a practice somewhat like this in the following passage of the *Æneid* :—

Nec non Threïcus longa cum veste sacerdos
Obloquitur numeris septem discrimina vocum :
Jamque eadem digitis, jam pectine pulsat eburno.

Lib. VI. l. 645.

The Thracian bard, surrounded by the rest,
There stands conspicuous in his flowing vest,
His flying fingers, and harmonious quill,
Strike sev'n distinguish'd notes, and sev'n at once they fill,

Dryden's translation, book VI. l. 877.

From which it at least appears, that the instrument was placed in a horizontal position, and that the strings were struck, not by the fingers, but with a plectrum, which might be a quill or a bow, or almost any other thing fit for the purpose.

Plato, in his treatise de Legibus VII. 794. Ed. Serr. advises to train up children to use the right and the left hand indifferently. In some things, says he, we can do it very well, as when we use the lyre with the left hand and the stick with the right. Dr. Jortin says it may be collected from this, that the fingers of the left hand were occupied in some manner upon the strings, else barely to hold a lyre shewed no very free use of the left hand ; and it appears from Ptolemy. II. 12, that they used both hands at once in playing upon the lyre, and that the fingers of the left were employed, not in stopping, but in striking the string.

But see the figure of an ancient statue, representing Apollo playing on

Figures 21, 22, are two different representations of the Lyra triplex, the one from Blanchinus, the other from a writer of far less respectable authority ; concerning this instrument it is necessary to be somewhat particular.

Athenæus lib.

VIV. cap. xv. de-

scribes an instrument of a very singular construction, being a lyre in the form of a tripod, an invention, as it is said, of Pythagoras Zacynthius. This person is mentioned by Aristoxenus, in his *Elements*, page 36 ; and Meibomius, in a note on the passage, says, on the authority of Diogenes Laertius, that he was the author of *Arcana Philosophiæ*, and adds, that it was from him that the proverbial saying, *ipse dixit*, had its rise ; with respect to the instrument, it is exhibited, in two forms (see above), the first taken from a sarcophagus at Rome, referred to by Blanchinus, the other from an engraving in the *Histoire de la Musique*, of Monsieur de Blainville, for which it is to be suspected he had no other authority than the bare verbal description of Athenæus, who has said, that it comprehended three distinct sets of chords, adjusted to the three most ancient of the modes, the Dorian, the Phrygian, and the Lydian.

The Trigon, an instrument mentioned by Nichomachus, among those which were adjusted by Pythagoras, after he had discovered and settled the ratios of the consonances. It was used at feasts, and it is said, was played on by women, and struck either with a quill, or beaten with little rods of different lengths and weights, to occasion a diversity in the sounds. The figure 23 is taken from an ancient Roman anaglyph, mentioned by Blanchinus.

Fig. 22.

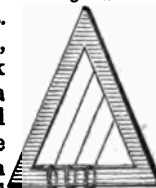


Fig. 24.



Fig. 25.



Figure 24 is also a Trigon, described by the same author ; figure 25 is the reverse of an ancient medal, and shews the manner of playing on it.

The Cymbals

the lyre, fig. 18, which seems very clearly to evince the practice above spoken of.

Upon this relic of antiquity, a drawing whereof was found in the collection of the late Mr. N. Haym, it is observable that the lyre is of a form very nearly resembling the violin, as having a body, and also a neck, which is held in the left hand ; the instrument in the right, undoubtedly answers to the modern bow, with this difference, that its use was percussion and not friction, which latter is a modern and noble improvement ; the position of the instrument deserves to be remarked, as it corresponds exactly with the viol di braccio.

of Bacchus, figure 26, were two small brass vessels, somewhat in the form of a shield, which being struck together by the hands, gave a sound. The well-known statue of the dancing faun has one of these in each hand.

The Tympanum leve, figure 27, an instrument yet known by the name of the Tambour, and frequently used in dancing, was also used to sing to; it is distinguished by Catullus, Ovid, Suetonius, St. Augustine, and Isidore, of Sevil, from the great brazen drum, properly so called, this above-mentioned, was covered with the skin of some animal, and was struck either with a short twig or with the hand, as fig. 28.

Crotala, figure 29. These were instruments also of the pulsatile kind. The Crotalum was made of a reed, divided into two by a slit from the top, extending half way downwards: the sides thus divided being struck one against the other with different motions of the hands, produced a sound like that which the stork makes with her bill, wherefore the ancients gave that bird the epithet of Crotalistris, *i. e.*, Player upon the Crotalum; * and Aristophanes calls a great talker a Crotalum.

* Pausanias relates, that Hercules did not kill the Stymphalides with his arrows, but that he frightened, and drove them away with the noise of the crotala, the consequence whereof, supposing the relation to be true, is, that the crotalum must be a very ancient instrument. Ovid joins the crotalum with the cymbals.

Cymbala cum crotala prurientiaque arma Priapo
Ponit, et adducit tympana pulsa manu.

It appears by an ancient poem, entitled Copa, by some ascribed to Virgil, that those who played with the crotala danced at the same time. It farther appears, that in these dances, which were chiefly of women,

Fig. 30.

Fig. 31.

such a variety of wanton gesticulations and indecent attitudes and postures were practised, that Clemens Alexandrinus says, that the use of these instruments ought to be banished from the festivals of all Christians. And the same might have been said of the cymbals. See figures 30 and 31.

Some authors resemble the crotala to the castanets of the Spaniards, or perhaps of the Moors; for castanets are supposed to be of Moorish invention; but of these the crumata of the ancients seem more nearly to approach. These were made of bones, or the shells of fish. Scaliger observes, upon the above-mentioned poem, that they were very common among the Spaniards,

Fig. 26.



Fig. 27.

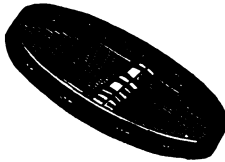


Fig. 28.



Fig. 29.



Mention is made by some writers on music, of an instrument of forty chords, called, from the name of its inventor, the Epigonium. Epigonius was a native of Ambracia, a city of Epirus, and a citizen of Sicyon, a town of Peloponnesus. He is mentioned together with Lasus Hermionensis, by Aristoxenus, in his Elements, pag. 3. And Porphyry makes him the head of one of those many sects of musicians that formerly subsisted, giving him the priority even of Aristoxenus, in these words:—'There were many sects, some indeed before Aristoxenus, as the Epigonians, Damonians, Eratocleans, Agenorians, and some others; which he himself makes mention of; but there were some after him, which others have described, as the Archestratians, Agonians, Philiscians, and Hermippians.'

Julius Pollux, in his Onomasticum, lib. IV. cap. ix. speaking of the instruments invented by certain nations, says, that the Epigonium obtained its name from Epigonius, who was the first that struck the chords of musical instruments without a plectrum.† The same author adds, that the Epigonium had forty chords, as the Simicum had thirty-five. Athenæus, lib. IV. speaks to the same purpose.

As to the Simicum, nothing more is known about it, than that it contained thirty-five chords. Vincentio Galilei, with good reason, supposes it to be somewhat more ancient than the Epigonium. Of both these instruments he has ventured to give a representation, in his dialogue on ancient and modern music; but it is very much to be doubted, whether he had any authority from antiquity for so doing. The form which he has assigned them severally, resembles nearly that of an upright harpsichord, which seems to indicate, that when played on, it was held between the legs of the musician, different perhaps from the harp, with the grave chords near and the acute remote from him.

The foregoing account comprehends the principal instruments in use among the ancient Greeks and Romans, so far as the researches of learned and inquisitive men have succeeded in the attempts to recover them; their forms seem to be thereby ascertained beyond the possibility of a doubt, and these it may be said, declare the state of the ancient musical practice, much more satisfactorily than all the hyperbolic relations extant, of its efficacy and influence over the human passions; and leave it an un-

especially the inhabitants of the province of Bortia [Andalusia] about Cadiz, to which Martial alludes.

Nec de Gadibus improbis puellas
Vibrabunt sine fine prurientes
Lascivos docili tremore lumbos. Lib. V. epigr. lxxix.

The same poet elsewhere speaks of the crumata in these words:—

Edere lascivos ad Bortia crumata gestus,
Ed Gaditanis ludere docta modis. Lib. VI. epigr. lxxi.

From which two passages, it appears clearly, that the above censure of Clemens Alexandrinus was well grounded.

† Plutarch in his dialogue before cited, relates that Olympus introduced the plectrum into Greece, which it is supposed was then deemed a useful invention. Certainly the lyre was originally touched by the fingers, and all that can be meant here, is, that Epigonius recurred to the primitive method, and played on his instrument, as the harp is now played on with the fingers; between which, and the touch of a plectrum or quill, the difference is very wide, as may be discovered by a comparison of the lute or harp with the harpsichord.

questionable fact, that the discoveries of Pythagoras, and the improvements made by the Greeks, his successors, terminated in a theory, admirable in speculation it is true, but to which such instruments

were adapted, as would have disgraced any performance, even in the least enlightened period, since the invention of that species of harmony, which has been the delight of later ages.

BOOK III. CHAP. XX.

THE gradual declension of learning which had begun before the time of Porphyry, the last of the Greek musical writers, and above all, the ravages of war, and the then embroiled state of the whole civilized world, put an end to all farther improvements in the science of harmonics; nor do we find, that after this time it was made a subject of philosophical enquiry: the succeeding writers were chiefly Latins, who, as they were for the most part followers of the Greeks, contributed but very little to its advancement; and, for reasons which will hereafter be given, the cultivation of music became the care of the clergy; an order of men, in whom the little of learning then left, in a few ages after the establishment of christianity, centered.

But before we proceed farther to trace the progress of the science, it is proper to remark, that the writings of the Greeks not only leave us in great uncertainty as to the state of music in other countries, but that they do not exclude the possibility of its having arrived at a great degree of perfection, even before that discovery of the consonances, which is by all of them allowed to be the very basis of the Greek system. For let it be remembered, that Pythagoras is supposed to have lived so late as A.M. 3384, which is about 560 years before the birth of Christ; and that long before his time, such effects were ascribed to music, as well by the sacred as profane historians, as are utterly inconsistent with the supposition, that it was then in its infancy. It were endless to enumerate the many passages in sacred writ, declaring the power of music: the story of David and Saul, and the effects attributed to the harp; but more especially the frequent mention of instruments with ten strings, would lead us to think, that the art had arrived to a state of greater perfection than the writers above-mentioned suppose. Here then arises a question, the solution whereof is attended with great difficulty; namely, whether the Jews, not to mention the various other nations, that had subsisted for many ages, previous to the times from whence we begin our account, in a state of very improved civilization, had not a musical theory? or is it to be conceived, that mankind, with whose frame and structure, with whose organs and faculties, harmony is shewn to be connatural, could remain for so many centuries in an almost total ignorance of its nature and principles?

To this it is answered, that the knowledge of the state and condition of past times, is deducible, with any degree of certainty, only from history; that the information communicated by the means of writing, must depend on an infinite variety of circumstances, such as a disposition in men of ability to communicate that information which is derived from a long course

of study, the permanency of language, a faithful and uncorrupt transmission of facts, and an absence of all those accidents, that in the course of events hinder the propagation of knowledge; and wherever these fail, the progress of human intelligence must necessarily be intercepted. To obstructions arising from one or other of these causes, is to be imputed that impenetrable obscurity in which the events of the earlier ages lie involved; an obscurity so intense, that no one presumes to trace the origin of any of the arts, and a vast chasm is supplied by the mythologists, the poets, and that species of history which we distinguish from what is truly authentic and worthy of credit by the epithet of fabulous; even antiquity itself, which stamps a value on some sort of evidence, will in many cases diminish the credit of an historian; and mankind have not yet settled what degree of assent is due to the testimony of the most ancient of all profane historians, the venerable Herodotus.

Admitting as a fact, that Egypt in the infancy of the world, was as well the seat of learning as of empire; and admitting also the learning of the Persian Magi, the Indian Brachmans, and other people of the east, not to mention the Phenicians and the Chinese, to be as great as some pretend, who have magnified it to a degree that exceeds the bounds of moderate credulity; nevertheless, the more sober researchers into antiquity, have contented themselves with a retrospect limited by the time when philosophy began to flourish in Greece; and it is only on the writers of that country that we can depend.

An investigation of the Jewish theory would be a fruitless attempt, but of their practice we are enabled to form some judgment, by the several passages in the Old Testament that declare the names and number of the Hebrew instruments, and mention the frequent use of them in sacrifices, and other religious solemnities; but it is to be observed, that the correspondence of the names of their instruments, with the names of those in use in modern times, is a circumstance from which no argument in their favour can be drawn, for a reason herein before given.

Mersennus, and after him Kircher, whose elaborate researches into the more abstruse parts of ancient literature, render him in some particulars a respectable authority, have exhibited the forms of many of the ancient Jewish musical instruments: the latter of these authors professes to have gone to the fountain head for his intelligence; and the result of an attentive perusal of as many of the Rabbinical writers and commentators on the Talmud as he could lay his hands on, he has given to the public in the *Musurgia*, tom. I. pag. 47. How far the authorities adduced by him will warrant such a precise designation of their respective forms,

as verges in some instances too near our own times, is left to the decision of those who shall have curiosity enough to peruse them; but lest it should be said that the subject is too important to be passed over in silence, the substance of what he has delivered on this head is here given.

He says that the author of a treatise entitled *Schilte Haggiborim*, i. e. the Shield of the Mighty, who he elsewhere makes to be Rabbi Hannase, treats very accurately on the musical instruments of the Hebrews, and reckons that they were thirty-six in number, and of the pulsatile kind, and that David was skilled in the use of them all. Kircher however does not seem to acquiesce altogether in the first of these opinions, for he proceeds to a description de instrumentis Hebreorum Polychordis sive Neghinoth; these it seems, according to his author above-named, were of wood, long and round, consisting of three strings made of the intestines of beasts: the instruments had holes bored underneath them; and, to make them sound, the strings were rubbed with a bow composed of the hairs of a horse's tail, well extended and compacted together. Kircher speaks particularly of the Psalter, or Nablium, the Cythara, or, which is the same thing, the Assur, Nevel, Chinnor, the Machul, and the Minnin. He says that no one has rightly described the Psalter of David, and that some have thought that the word rather denoted certain genera of harmony, or modulations of the voice, than any kind of instrument: that according to Josephus it had twelve sounds, and was played on with the fingers; that Hilarus, Didymus, Basilus, and Euthymius call it the straitest of all musical instruments—that Augustine says it was carried in the hand of the player, and had a shell or concave piece of wood on it that caused the strings to resound—that Hieronymus describes this instrument as having ten strings, and resembling in its form a square shield—that Hilarus will have it to be the same with the Nablium. Kircher himself is certain that it was a stringed instrument, and cites Suidas to prove that the word Psalterium is derived from Psallo, to strike the chords with the ends of the fingers. He farther says, that many writers suppose it to have had a triangular form, and to resemble the harp of David, as commonly painted in pictures of him; and that some are express in the opinion that the Psalterium and the Nablium, as being struck with the fingers of both hands, were one and the same instrument; and to this purpose he cites the following passage from Ovid:—

Disce etiam duplici genialia Naulia palmâ
Verrere: conveniunt dulcibus illa modis.

ART. AMAT. lib. III. l. 327.

The Nevel, notwithstanding the resemblance between its name and that of the Nablium, and the confusion which Kircher has created by using them promiscuously, clearly appears to have been a different instrument; for he says it was in the form of a trapezium; and the Nablium, which he has taken great pains to prove to be the same with the Psalterium, he shows to have been of a square form. Of the Assur, he only says that it had ten chords;

the Chinnor he supposes to have had thirty-two, the Machul six, and the Minnin three or four; and that in their form they resembled, the one the Viol and the other the Chelys. To give a clearer idea, he has exhibited, from an old book in the Vatican library, several figures representing the Psalterium, figure 32; the Chinnor, figure 33; the Machul, figure 34; the Minnin, fig. 35; and the Nevel, figure 36.*

Fig. 32.



Fig. 33.

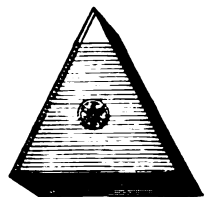


Fig. 34.



Fig. 35.



Fig. 36.

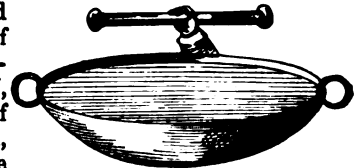


Kircher speaks also of another instrument mentioned by Rabbi Hannase, who it seems was the author of the book before cited, *Schilte Haggiborim*, and also in the Targum, called *Haghnugab*, consisting of six strings, and resembling the greater Chelys or Viol di Gamba, differing from it only in the number of its chords: he says it is often confounded with the Machul.

He next proceeds to treat of the pulsatile instruments of the Hebrews, in contradistinction to those of the fidicinal or stringed kind; and first he speaks of the Thoph or Tympanum, figure 37, an instrument of Egyptian original, and used by the priests of that country in their public worship. He relates on the authority of Rabbi Hannase that it had the likeness of a ship; and that by the Greeks it was also called *Cymbalum*, from *cymba*, a boat: he adds that it was covered with the skin of an animal, and was beat on with a pestle or rod of iron or brass.

He proceeds to say that though the Machul is ranked among the fidicinal or stringed instruments, this name was given to an instrument of a very different form, and of the pulsatile kind; nay, he adds that Rabbi Hannase asserts that it was precisely the same with the Sistrum of the Egyptians, or the *Kroumsa* of the Greeks; and that it was of a circular

Fig. 37.



* The truth of this representation, so far as it relates to the Machul and Minnin, is strongly to be suspected; they both seem to require the aid of the hair bow, a kind of plectrum to which the ancients seem to have been absolute strangers. Besides their near resemblance to the lute and viol, instruments which it is supposed had their origin in Provence, is a strong argument against their antiquity.

form, made of iron, brass, silver, or gold, with little bells hung round it. Kircher corrects this description, and instead of little bells, supposes a number of iron rings, strung as it were on a rod or bar in a lateral position that went across the circle.

Fig. 38.

He says that a handle was affixed to it, by means whereof the instrument was flung backwards and forwards, and emitted a kind of melancholy murmur, arising from the collision of the rings, as well against each other as against the sides, the circle, and the bar on which they moved, figure 38. He adds, that the Thoph, or rather Sistrum of the Hebrews was thus

Fig. 39.

constructed, and that the virgins every where made use of it in the dances of the Sistri, as we read in the books of Exodus and Judges, that Mary, the sister of Moses, and the daughter of Jephtha, did: and he farther says, that according to accounts which he has received from credible witnesses, the Syrians in his time preserved the use of the Sistrum in Palestine.*

Gnets Berusim was another of the Hebrew pulsatile instruments; it seems by Kircher that there was some controversy about the form of it, but that Rabbi Hannase represents it as nothing more than a piece of fir in shape like a mortar. He says there belonged to it a pestle of the same wood, with a knob at each end, and in the middle thereof a place for the hand to grasp it: that those that beat on the instrument held it in the left hand and struck with the right on the edge and in the middle, using the knobs alternately. Figures 40, 41. Kircher compares this instrument to the Crotalum already described, but seemingly with little propriety; and to the Gnaccari of the Italians, of which word, considered as a technical term, it is hard to find the meaning.

Fig. 40.

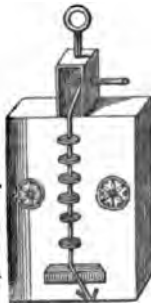


Fig. 41.



Minagnghinim was the name of another of the Hebrew pulsatile instruments, which, according to Rabbi Hannase, was a certain square table of wood, having a handle so fitted as conveniently to be held by it. On the table were balls of wood or brass, through which was put either an iron chain or an hempen chord, and this was stretched from the bottom to the top of the table. When the instrument was shaken, the striking of the balls occasioned a very clear sound, which might be heard at a great distance. See the representation which Kircher gives of it, figure 42.

Fig. 42.

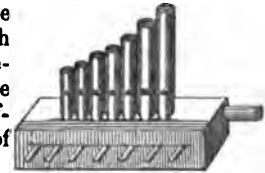


* The invention of the Sistrum is not to be ascribed to the Jews: it is generally supposed to be of Egyptian original. There are some forms of it, as that in particular, figure 39, which bears on it a figure of one of those many brute animals to which this superstitious and idolatrous people paid divine honours.

Magraphe Tamid, another of the pulsatile instruments of the Hebrews, is conjectured by Kircher to have been used for convoking the priests and Levites together into the temple: it is said to have emitted prodigious sound; and though Rabbi Hannase says no one can describe the form of it, Kircher thinks it must have been like one of our largest bells.

We are now to declare what instruments of the pneumatic kind were in use amongst the ancient Hebrews; and first we meet with the Masrakitha, which consisted of pipes of various sizes, fitted into a kind of wooden chest, open at the top, but at the bottom stopped with wood covered with a skin; by means of a pipe fixed to the chest, wind was conveyed into it from the lips: the pipes were of lengths proportioned musically to each other, and the melody was varied at pleasure by the stopping and unstopping with the fingers the apertures at the upper extremity. Kircher thinks it differed but little from the instrument which Pan is constantly represented as playing on; there seems however to be a difference in the manner of using it. See fig. 43.

Fig. 43.



Of the Sampunia, derived, as Kircher conjectures, from the Greek Symphonia, as also of the preceding instrument, mention is made, as Kircher asserts, in the Chaldaeic of the book of Daniel, chap. iii. He says also that it is described in the Schilte Haggiborim, as consisting of a round belly, made of the skin of a ram or wether, into which two pipes were inserted, one to fill the belly with wind, the other to emit the sound; the lower pipe had holes in it, and was played on by the fingers. In short, it seems to have been neither more nor less than the Cornamusa, or common bag-pipe; and Kircher says that in Italy, even in his days, it was known by the name of the Zampugna.

The Hebrews had also an instrument, described in the Schilte Haggiborim, called Macraphe d'Aruchin, consisting of several orders of pipes, which were supplied with wind by means of bellows; it had keys, and would at this time without hesitation be called an organ. See fig. 44.†

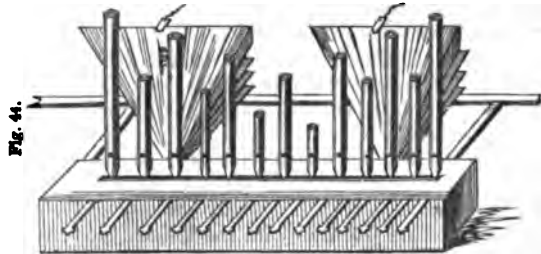


Fig. 44.

† This instrument is delineated by Kircher, but the figure of it above referred to, is taken from the Musica Historica of Wolfgang Gaspar Prints, written in the German language, and printed at Dresden in 4to. anno. 1690, who cites the Collectanea Philologica of Johannes Schütters, to justify his deviations from Kircher, in the form of some of the instruments described in the Masurgia. But it is to be feared, that his author has erred in giving to the Maschul and Minnin above described, the harp bow, of which not the least trace is to be found in the writings of any of the ancients.

Of *Fistulæ* it seems the Hebrews had sundry kinds; they were chiefly the horns or bones of animals, straight or contorted, as nature fashioned them: the representations of sundry kinds of them, in figures 45, 46, 47, 48, are taken from Kircher.

Fig. 47.



Fig. 45.



Fig. 46.



Fig. 48.

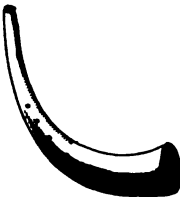


Fig. 49.



In the account which Blanchinus has given of the Jewish musical instruments, he mentions a mallet of wood used by them in their worship, and which at certain times is beaten by the people on the beams, seats, and other parts of the synagogue, in commemoration of the tumult preceding the Crucifixion, or, as the modern Jews say, at the hanging of Haman, figure 49. Instruments of this kind, and which produce noise rather than sound, are improperly classed among instruments of music.

Of the Hebrew musicians no very satisfactory account can be given. This of Kircher, extracted from the Rabbinical writers, is, perhaps, the best that can be expected: 'Asaph, according to the opinion of the interpreters, was the composer of certain psalms; he is said also to have been a singer, and to have sung to the cymbals of brass, and to have praised the Lord, and ministered in the sight of the ark.'

'Eman Ezraita, the singer, the son of Joel, of the children of Caath, was most skilful in the cymbal, and was in a manner equal in knowledge and wisdom to Ethan; he is the supposed author of the Psalm, beginning Domine Deus salutis meæ, which, because he gave it to be sung by the sons of Coreh, he inscribed both with his own and their name.'

'Ethan of Ezrachus, the son of Assaia, the son of Merari, played on the brass cymbal, and was endued with so much wisdom, that, according to the Book of Kings, no mortal, except Solomon, was wiser. The three sons of Coreh, Asir, Elcana, and Abiasaph, were famous singers and composers of Psalms.'

'Idithus was an excellent singer, and player on the cythara; many confound him with Orpheus.' Kircher supposes, that he and the other Hebrew musicians were inspired with the knowledge of vocal and instrumental music, and that their performance was equal to their skill. He says, he doubts not but that there were many other men, especially in the time of king Solomon, who were well skilled in divine music, for that the most excellent music was fittest for the wisest of mortals, and that of the

Hebrews must have been more efficacious in exciting the affections than that of the Greeks, or of later times, but of what kind in particular it was, and by what characters expressed, he says, its antiquity prevents us from knowing.*

A much later writer than him above cited, and who is now living, Giambatista Martini, of Bologna, has entered very deeply into the music of the Hebrews; and it were to be wished, that he had been able to give a more satisfactory account of it than is to be found in his very learned work, the *Storia della Musica*, now publishing, but of which, as yet [in this year, 1771] the public are in possession of only one volume. Having few other sources of intelligence than the Talmud, and the writing of the Rabbins, we are not to expect much information in this particular.

CHAP. XXI.

FROM accounts so vague, and so abounding with conjectures, as are given of the ancient Hebrew music and musicians, and more especially of their instruments, even by writers of the best authority, it is very difficult to collect any thing whereon an inquisitive mind may rest. With regard to the Hebrew instruments, it is evident from the accounts of Kircher, and others, that some of them approach so nearly to the form of those of more modern times, as to give reason to suspect the authenticity of the representation: others appear to have been so very inartificially constructed, that we scarce credit the relation given of their effects. It is clear, that Kircher and Schütterus had from the Rabbinical writers little more than the bare names of many of the instruments described by them; yet, have they both, in some instances, ventured to represent them by forms of a comparatively late invention. Who does not see, that the Minnin, as represented by the former, and the lute, are one and the same instrument? and what difference can be discerned between the Machul and the Spanish Guitar? or can we believe, that the Macraphe d' Aruchin, and such rude essays towards melody as the Gnets Berusim, the Sistrum, or the Minagnhinim, could subsist among the same people, in any given period of civilization?

As to Martini's account, it speaks for itself; it is extracted from the sacred writings, which, at this distance of time, even with the assistance of the most

* The confusion of Idithus with Orpheus, suggests a remark on the endeavours of some, to establish the identity of eminent persons of different names and countries, and perhaps of different ages, upon hardly any other ground, than some one particular in their history common to them both: how far it is possible to extend a hypothesis of this kind, the present bishop of Gloucester has shewn in his *Divine Legation of Moses*. In the course of that work, the author has thought it necessary to controvert an assertion of Sir Isaac Newton; namely, that Osiris and Sesostris, both kings of Egypt, were one and the same person; in order to do this, he has undertaken to prove that the British king Arthur and William the Conqueror were not two distinct beings, but identically one person; and, as far as the method of reasoning usual in such kind of arguments will serve him, he has established his proposition.

The conclusion from this correspondence of such a variety of circumstances, is much stronger in favour of the identity of Arthur and William, than could have been imagined, and yet, it has no other effect on the mind, than to discredit this method of reasoning, which is fraught with fallacy, and must terminate in scepticism.

What then can we say to the opinion of those, who confound the Hebrew musician Idithus with the ancient Orpheus; what rather can we think of him, who has attempted to show that this latter, and the royal prophet David, were one and the same person. See the *Life of David*, by Dr. Delany.

learned comments, fall short of affording that satisfaction, which is to be wished for in an enquiry of this kind.

Under these disadvantages, which even an enquiry into the instruments of the Hebrews lies under, an attempt to explain their musical theory must seem hopeless. Nor is it possible to conceive any thing like a system, to which such instruments as the Thoph, or the Gnets Berusim could be adapted: if the strokes of the pestle against a mortar, like those of the latter, be reducible to measure; yet, surely the rattling of a chain, like the music of the Minagghinim, is not; or what if they were, would the sounds produced in either case make music? To speak freely on this matter, whatever advantages this people might derive from the instructions of an inspired law-giver, and the occasional interpositions of the Almighty, it no where appears that their attainments in literature were very great: or that they excelled in any of those arts that attend the refinement of human manners; the figure they made among the neighbouring nations appears to have been very inconsiderable; and with respect to their music, there is but too much reason to suppose it was very barbarous. The only historical relation that seems to stand in the way of this opinion, is, that of the effects wrought by the music of David on the mind of Saul, a man of a haughty irascible temper, not easily susceptible of the emotions of pity or complacency, and, at the time when David exercised his art on him, under the power of a demon, or, at best, in a frenzy.

Kircher has taken upon him to relate the whole process of the dispossession of Saul, by David, and has done it as circumstantially as if he had been present at the time; his reasoning is very curious, and it is here given in his own words:—

‘That we may be the better able to resolve this question, how David freed Saul from the evil spirit, I shall first quote the words of the Holy Scripture, as found in the first book of Samuel, chap. xvi. ver. 23.’ “And it came to pass when the evil spirit from God was upon Saul, that David took an harp, and played with his hand: so Saul was refreshed, and was well, and the evil spirit departed from him.” The passage in the holy text informs us very clearly, that the evil spirit, whatsoever it was, was driven away by music; but how that came to pass is differently explained. The Rabbins on this place say, that when David cured Saul, he played on a cythara of ten strings; they say also, that David knew that star, by which it was necessary the music should be regulated, in order to effect the cure: thus Rabbi Abenezra. But Picus of Mirandola says, that music sets the spirits in motion, and thereby produces the like effects on the mind, as a medicine does on the body; from whence it may seem, that the comment of Abenezra is vain and trifling, and that David regarded not the aspects of the stars; but trusting to the power of his instrument, struck it with his hand as his fancy suggested.

‘And we, rejecting such astrological fictions, assert, that David freed Saul, not with herbs, potions, or other medicaments, as some maintain, but by the

‘sole force and efficacy of music. In order to demonstrate which, let it be observed, that those applications which unlock the pores, remove obstructions, dispel vapours and cheer the heart, are best calculated to cure madness, and allay the fury of the mind; now music produces these effects, for as it consists in sounds, generated by the motion of the air, it follows that it will attenuate the spirits, which by that motion are rendered warmer, and more quick in their action, and so dissipate at length the melancholy humour. On the contrary, where it is necessary to relax the spirits, and prevent the wounding or affecting the membranes of the brain; in that case, it is proper to use slow progressions of sound, that those spirits and biting vapours, which ascend thither from the stomach, spleen, and hypochondria, may be quietly dismissed. Therefore, the music of David might appease Saul, in either of these two ways of attenuation or dismissal: by the one, he might have expelled the melancholy from the cells of the brain, or he might by the other have dissolved it, and sent it off in thin vapours, by insensible perspiration. In either case, when the melancholy had left him, he could not be mad until the return of it, he being terrestrial, and as it were, destitute of action, unless moved thereto by the vital spirits, which had led him here and there; but they had left him, when for the sake of the harmony they had flown to the ears, abandoning, as I may say, their rule over him. And though, upon the cessation of the harmony they might return, yet, the patient having been elevated, and rendered cheerful, the melancholy might have acquired a more favourable habit. From all which, it is manifest, that this effect proceeded not from any casual sound of the cythara, but from the great art and excellent skill of David in playing on it; for, as he had a consummate and penetrating judgment, and was always in the presence of Saul, as being his armour-bearer, he must have been perfectly acquainted with the inclination and bent of his mind, and to what passions it was most subject: hence, without doubt, he being enabled, not so much by his own skill, as impelled by a divine instinct, knew so dexterously, and with sounds suited to the humour and distemper of the king, to touch the cythara, or indeed any other instrument; for, as has been mentioned, he was skilled in the use of no fewer than thirty-six, of different kinds. It might be, that at the instant we are speaking of, he recited some certain rhythm, proper for his purpose, and which Saul might delight to hear; or, that by the power of metrical dancing, joined to the melody of the instrument, he wrought this effect: for Saul was apt to be affected in this manner, by the music and dancing of his armour-bearer; as he was a youth of a very beautiful aspect, these roused up the spirits, and the words, which were rhythmically joined to the harmony, tickling the hearing, lifted up the mind, as from a dark prison, into the high region of light, whereby the gloomy spirits which oppressed the heart were dissipated, and room was left for it to dilate itself, which dilation was naturally

'followed by tranquillity and gladness.' Musurgia, 'tom. II. pag. 214, et seq.

Whoever will be at the pains of turning to the original from whence this very circumstantial relation is taken, will think it hardly possible for any one to compress more nonsense into an equal number of words than this passage contains, for which no better apology can be made than that Kircher, though a man of great learning, boundless curiosity, and indefatigable industry, was less happy in forming conclusions than in relating facts; his talents were calculated for the attainment of knowledge, but they did not qualify him for disquisition; in short he was no reasoner. With regard to the dispossession of Saul, supposing music to have been in any great degree of perfection among the Hebrews in his time, there is nothing incredible in it; and besides it has the evidence of sacred history to support it: it would therefore have argued more wisdom in the Jesuit to have admitted the fact, without pretending to account for it, than by so ridiculous a theory as he has endeavoured to establish, to render the narration itself doubtful.

After this censure above passed on the music of the Hebrews, it would argue an unreasonable prejudice against them, were it not admitted that their poetry carries with it the signatures of a most exalted sublimity: to select instances from the prophets might be deemed unfair, as there are good reasons to believe that something more than mere human genius dictated those very energetic compositions; but if we look into those of their writings which the canon of our church has not adopted, we shall find great reason to admire their poetical abilities. It is true that the boldness of their figures, and those abrupt transitions, which distinguish the oriental compositions from those of most other countries, are not so well relished by a people with whom the false refinements on life and manners have taken place of the original simplicity of nature; but in the more regular and less enthusiastic spirit of expression, we feel and admire their excellence. Not to mention the numberless instances of this sort that occur in the Psalms, there is one poem among them, which for its truly elegiac simplicity, pathetic expression of the woes of captivity, and the lamentations for the sufferings of an afflicted people, has perhaps not its fellow in any of the dead or living languages. The poem here meant is the CXXXVIIth Psalm.*

From the manner in which it appears the ancients treated music, we may observe that they reasoned very abstractedly about it; the measure of intervals, either by their ratios, or by their ear, was in their judgment a very important branch of the science, and we are not to wonder at that close connection, which in the writings of the Pythagoreans at least,

* It has already been mentioned, page 93, that among the Jews the chief use of music was in sacrifices and other religious ceremonies. To this may be added that it also accompanied the celebration of the funeral rites. When Jesus approached the Ruler's house, in order to revive his daughter, we are told by the Evangelist, *Matthew*, chap. ix., v. 23., that he saw "the Minstrels and People making a noise." Dr. Hammond, in a very learned note on this passage, informs us that the custom of having music at funerals came to the latter Jews from the Gentiles.

is discoverable between the three sciences, music, arithmetic, and geometry. In this view it may perhaps be said that the study of music had an influence on the minds and tempers of men, as we say that the study of the mathematics has a tendency to induce a habit of thinking, to invigorate the powers of the understanding, and to detect the fallacy of specious and delusive reasoning, but in what other way it could affect the manners, or indeed the mind, unless in that very obvious one of an address to the passions, which we at this day are all sensible of, is utterly impossible to determine.

And indeed the investigation of proportions and the properties of numbers may be said to be very different from the art of combining sounds, so as to excite that pleasure which we ascribe to music; and perhaps it may not be too much to say that the understanding has little to do with it, nay, some have carried this matter so far as to question whether the delight we receive from music does not partake more of the sensual than the intellectual kind;† however this at least may be said, that it is some faculty, very different from the understanding, that enables us to perceive the effects of harmony, and to distinguish between consonant and dissonant sounds, and in this respect, the affinity between music, and that other art, which for more reasons than all are aware of, has ever been deemed its sister, is very remarkable. That painting has its foundation in mathematical principles, is certain, nay, that there is a harmony between colours, analogous to that of sounds, is demonstrable; now the laws of optics, the doctrine of light and colours, and the principles of perspective, connected as they are with geometry, all of which painting has more or less to do with, are things so different from the representation of corporeal objects, from the selection and artful arrangement of beautiful forms, from the expressions of character and passion as they appear in the human countenance, and, lastly, from that creative faculty in which we suppose the perfection of painting to consist, that we scruple not to say that a man may be an excellent painter with a slender knowledge of the mathematics; and the examples of the most eminent professors of the art, are a proof of the assertion.

But the reason why the ancient writers treated the subject in this manner is, that they used the word Harmony to express relation and coincidence in general; nay, so extensively was this appellation used, that many authors of treatises on this subject have thought it previously necessary to a discussion of music in its three most obvious divisions of rhythmic, metric, and harmonic, to treat of mundane, humane, and political music; the three last of which species, if at all intitled to the name of music,‡ must

† This metaphysical question is discussed and determined in the negative, i. e. that music is an intellectual pleasure, by the ingenious Mr. John Norris, of Bemerton. See his *Miscellanies*, pag. 309, 12mo.

‡ Aristoxenus's division is rhythmic, metric, organic, lib. II. That of Boetius, mundane, humane, and instrumental. By the first is to be understood the harmony of the spheres, before spoken of; by the second, the harmony subsisting between the body and the rational soul as united together, each being actuated by the other; and also that other kind of harmony, consent, relation, or whatever else it may be called, between the parts of the body, with respect to each; and again between those

owe it to a metaphor, and that a very bold one: Aristides Quintilianus uses another method of division, which it must be confessed is the more natural of the two, and says that music is of two kinds, the contemplative and the active; the first of these he subdivides into natural and artificial; which latter he again divides into the harmonic, the rhythmic, and the metric; the active he divides into the usual and the enunciative; the usual, containing melopoëia, rhythmopoëia, and poësia; and the enunciative the organic, the odiac, the hypocritic.*

Thus we see that the ancients, when they treated of music, used the word Harmony in a sense very different from that in which it is understood at this day; for there is doubtless a harmony between sounds emitted in succession, which is discernible as long as the impression of those already struck remains uneffaced; yet we choose to distinguish this kind of relation by the word Melody, and that of Harmony is appropriated to the coincidence of different sounds produced at the same instant: if it be asked why the ancients used the word Harmony in a sense so very restrained, as is above represented, the answer is easy, if that position be true which many writers have advanced, namely, that their music was solitary, and that they were utter strangers to symphonic harmony. This the admirers of antiquity will by no means allow; and, to say the truth, there are very few questions which have more divided the learned world than this. In order that the reader may be able to form a judgment on a matter of so great curiosity, the authorities on both sides shall now be produced, and submitted to his consideration.

To avoid confusion, it will be necessary first to reduce the proposition to the form of a question, which, to take it in the sense in which it has generally been discussed, seems to be, Whether the ancients had the knowledge of music in symphony or consonance, or not?

The advocates for the affirmative are Franchinus, or, as he is frequently named, Gaffurius, Zarlino, Gio. Battista Doni, Isaac Vossius, and Zaccaria

affections of the human mind, which, opposed to, or counterbalancing each other, and aided by reason, produce a kind of moral harmony, the effects whereof are visible in an orderly and well-regulated conduct.

To these Kircher and others have added *musica politica*, which, say they, consists in that harmonical proportion, which in every well-regulated government subsists between the three several orders of the people, the high, the low, and the middle state.

Kircher, whose inventive faculty never fails him, has given scales demonstrating each of these supposed kinds of harmony; but whoever would be farther informed as to the nature of mundane music, as it is above called, or is desirous of knowing to what extravagant lengths the human imagination may be led, may consult the writings of our countryman Dr. Robert Fludd, or de Fluctibus, a physician, and a Rosicrucian philosopher; and who, though highly esteemed for his learning by Seiden, was perhaps one of the greatest mystics that ever lived. In a work of his entitled, *Utriusque Cosmi majoris scilicet et minoris metaphysica, physica, atque technica Historia*, printed at Oppenheim 1617, folio, is one book intitled *De Musica mundana*, wherein the author exhibits the form of what he calls *Monochordum mundanum*, an instrument representing a monochord, with the string screwed up by a hand that issues from the clouds. Fludd supposes the sound of the chord, when open, to answer to terra or the earth, and to correspond with the note gamut in the scale of music: from thence he ascends by tones and semitones, in regular order, to water, and the other elements, through the planets, and so to the empyrean, answering to g g in the ratio of the diapason.

Mersennus has thought this diagram worthy of a place in his Latin work; and, to say the truth, most of the plates in this and other of Fludd's works, and by the way they abound with them, are to the last degree curious and diverting. There will be farther occasion to speak of this extraordinary man, Fludd, in the course of this work.

* See the Analysis of Quintilian, in chap. xviii. of the next preceding book.

Tevo, all, excepting Vossius, musicians, and he confessedly a man of learning, but a great bigot, and of little judgment: the sum of their arguments is, that it appears by the writings of the ancients that their skill in harmony was very profound, and that they reasoned upon it with all the accuracy and precision which became philosophers; that the very first discoveries of the nature of musical consonance, namely, those made by Pythagoras, tended much more naturally to establish a theory of harmony than of mere melody or harmony in succession, that supposing Pythagoras never to have lived, it could not have happened, but that the innumerable coincidences of sounds produced by the voice or by the percussion of different bodies at the same instant, which must necessarily occur in the course of a very few years, could not fail to suggest a trial of the effects of concordant sounds uttered together, or at one and the same point of time; that those passages of sacred writ that mention commemoration of remarkable events, or the celebration of public festivals, as that of the dedication of Solomon's temple, with a great number of voices and instruments, hardly allow of the supposition that the music upon these occasions was unisonous.

All this it may be said is mere conjecture, let us therefore see what farther evidence there is to countenance the belief that the ancients were acquainted with the use of different parts in music; Aristotle in his treatise concerning the world, lib. V. has this question, 'If the world is made of contrary principles, how comes it that it was not long ago dissolved?' In answer to this he shows that its beauty, perfection, and duration are owing to the admirable mixture and temperament of its parts, and the general order and harmony of nature. In his illustration of this argument he introduces music, concerning which he has this passage: *Μουσική δὲ ὀξεῖς ἄμα καὶ βαρεῖς, μακροὺς τε καὶ βραχεῖς φθόγγους μίχουσα, ἐν διαφοραῖς φωναῖς, μίαν ἀποτελεσεν ἁρμονίαν.* 'Music, by a mixture of acute and grave, and of long and short sounds of different voices, yields an absolute or perfect concentus or concert.'—Again, lib. VI. explaining the harmony of the celestial motions, he says, that 'though each orb has a motion proper to itself, yet is it such a motion as tends to one general end, proceeding from a principle common to all the orbs, which produce, by the concord arising from their motions, a choir in the heavens:' and he pursues the comparison in these words: *Καθάπερ δὲ ἐν χορῶν κορυφαίαι καταξαντες, συνεπηγεῖ πᾶς ὁ χορὸς ἀνδρῶν ἔθ' ὅτε καὶ γυναικῶν ἐν διαφοραῖς φωναῖς ὀξευτέραις καὶ βαρυτέραις μίαν ἁρμονίαν ἐμμελεῖ κεραννύντων.*

Seneca, in his Epistles, has this passage. 'Do you not see of how many voices the chorus consists, yet they make but one sound? In it some are acute, others grave, and others in a mean between both; women are joined with men, and pipes are also interposed among them, yet is each single voice concealed, and it is the whole that is manifest.'†

† 'Non vides quam multorum vocibus chorus constet? unus tamen ex omnibus sonus redditur. Aliqua illic acuta est, aliqua gravis, aliqua media. Accedunt viris femine, interponuntur tibice, singulorum latent voces, omnium apparent.' Seneca Epist. 84.

Cassiodorus has the following passage, which may seem somewhat stronger : 'Symphony is the adjustment of a grave sound to an acute, or an acute to a grave sound, making a melody.'

From the several passages above-cited it appears, that the ancients were acquainted with symphonetic music of a certain kind, and that they employed therein voices differing in degrees of acuteness and gravity ; and thus far the affirmative of the question in debate may seem to be proved.

But in support of the negative we have the authorities of Glareanus, Salinas, Bottrigari, Artusi, Cerone, Kircher, Meibomius, Kepler, Bontempi, our countrymen Morley, Wallis, and others, a numerous band, who infer an absolute ignorance among the ancients of harmony produced by different and concordant sounds, affecting the sense at the same instant, from the general silence of their writers about it, for the exceeding skill and accuracy with which they discussed the other parts of music, leave no room to imagine but that they would have treated this in the same manner had they been acquainted with it : what discoveries accident might produce in that long series of years prior to the time of Pythagoras no one can say ; history mentions none, nor does it pretend that even he made any use of his discovery, other than to calculate the ratios of sounds, regulate the system, and improve the melody of his time.

That voices and instruments, to a very great number, were employed at public solemnities is not denied, but it is by no means a consequence that therefore the music produced by them consisted of different parts ; at this day among the reformed churches singing by a thousand different voices of men, women, and children, in divine worship is no very unusual thing ; and yet the result of all this variety of sound is hardly ever any thing more than mere melody, and that of the simplest and most artless kind. Thus much in answer to the arguments founded on the improbability that the ancients could be ignorant of symphonetic harmony, in the sense wherein at this day the term is understood.

With respect to the several passages above-cited, they seem each to admit of an answer ; to the first, produced from Aristotle, it is said that the word Symphony, by which we should understand the harmony of different sounds uttered at one given instant, is used by him to express two different kind of consonance, symphony and antiphony ; the first, according to him, is the consonance of the unison, the other of the octave. In his Problems, § xix. prob. 16. he asks why symphony is not as agreeable as antiphony ? the answer is, because in symphony the one voice being altogether like the other, they eclipse each other ; the symphony can therefore in this place signify nothing but unisonous or integral harmony : and he elsewhere explains it to be so, by calling that species of consonance, Omophony ; as to Antiphony, it is clear that he means by it the harmony of an octave, for he constantly uses the word in that sense ; and lest there should any doubt remain about it, he says that it is the consonance between sounds produced by the different voices of a boy and a man, that are as Nete and Hypate ; and that those sounds form

a precise octave is evident from all the representations of the ancient system that have ever been given. The sum of Aristotle's testimony is, that in his time there was a commixture of sounds, which produced a concinnous harmony : no doubt there was, but what is meant by that concinnous harmony his own words sufficiently explain.

As to Seneca, it must be confessed that the vox media must imply two extremes ; but what if in the chorus which he speaks of, the shrill tibiae were a disdiapason above the voices of the men, and that the women sung, as they ever do, an octave above them, would not these different sounds produce harmony ? Certainly they would ; but of what kind ? Why the very kind described by him, such as seems to make but one sound, which can be said of no harmony but that of the unison or octave.

Lastly, as to Cassiodorus, his words are 'Symphonia est temperamentum sonitus gravis ad acutum vel acuti ad gravem, modulamen efficiens, sive in voce, sive in percussione, sive in flatu : '* as to the word Temperamentum, it can mean only an adjustment ; and Modulamen was never yet applied to sounds but as they followed each other in succession : to modulate is to pass, to proceed from one key or series to another ; the very idea of modulation is motion : the amount then of this definition is, that the attemperament or adjustment of a grave to an acute sound, or of an acute to a grave one, constitutes such a kind of symphony as nothing will answer to but melody ; which is above shewn to be not instantaneous, but successive symphony or consonance.

There is yet another argument to the purpose. The ancients did not reckon the third and sixth among the consonances ; this is taken notice of by a very celebrated Italian writer, Giov. Maria Artusi, of Bologna, who, though he has written expressly on the imperfections of modern music, scruples not therefore, and because the third and sixth are the beauty of symphonic music, to pronounce that the ancients must have been unacquainted with the harmony of music in parts, in the sense in which the term is now understood : † and an author whom we shall presently have occasion to cite more at large, says expressly that they acknowledge no other consonances than the diapason, diapente, and diatessaron, and such as were composed of them ; ‡ nor does it any where appear that they were in the least acquainted with the use of discords, or with the pleasing effects produced by the preparation and resolution of the dissonances ; and if none of these were admitted into the ancient system, let any one judge of its fitness for composition in different parts.

In Morley's Introduction is a passage from whence his opinion on this question may be collected ; and, as he was one of the most learned musicians that this nation ever produced, some deference is due to it ; speaking of Descant, § he uses these words : ' When descant did begin, by whom, and where it was in-

* M. Aur. Cassiodor. Opera. De Musica.

† Artusi delle Imperfezioni della Moderna Musica. Ragionam. primo, Cart. 14.

‡ Musurg. tom. I. pag. 540.

§ Descant, as used by this author, has two significations ; the one answers precisely to music in consonance, the other will be explained hereafter.

'vented, is uncertaine; for it is a great controversie
'amongst the learned if it were knowne to the
'antiquitie, or no; and divers do bring arguments to
'prove, and others to disprove the antiquitie of it; and
'for disproving of it, they say that in all the workes
'of them who have written of musicke before Fran-
'chinus, there is no mention of any more parts then
'one; and that if any did sing to the harpe (which
'was their most usual instrument) they sung the same
'which they plaid. But those who would affirme
'that the ancients knew it, saie, That if they did not
'know it, to what ende served all those long and
'tedious discourses and disputations of the conso-
'nantes, wherein the moste part of their workes are
'consumed; but whether they knew it or not, this
'I will say, that they had it not in halfe that variety
'wherein we now have it, though we read of much
'more strange effects of their musicke then of ours.'
Annotations on Morley's Introduction, part II.

CHAP. XXII.

THE suffrage of Kircher, in a question of this nature, will be thought to carry some weight: this author, whose learning and skill in the science are universally acknowledged, possessed every advantage that could lead to satisfaction in a question of this nature, as namely, a profound skill in languages, an extensive correspondence, and an inquisitive disposition; and for the purpose had been indulged with the liberty of access to the most celebrated repositories of literature, and the use of the most valuable manuscripts there to be met with; and who, to sum up all, was at once a philosopher, an antiquary, an historian, a scholar, and a musician, has given his opinion very much at large in nearly the following words:—

'It has for some time been a question among
'musicians whether the ancients made use of several
'parts in their harmony or not: in order to determine
'which, we are to consider their polyodia as three-
'fold, natural, artificial, and unisonous; I call that
'natural which is not regulated by any certain rules
'or precepts, but is performed by an extemporary and
'arbitrary symphony of many voices, intermixing
'acute and grave sounds together; such as we observe
'even at this time, happens amongst a company of
'sailors or reapers, and such people, who no sooner
'hear any certain melody begun by any one of them,
'than some other immediately invent a bass or tenor,
'and thus is produced an harmony extemporary, and
'not confined by any certain laws, and which is very
'rude and imperfect, as it is almost always unison,
'containing nothing of harmony, except in the closes,
'and therefore of no worth; that the Greeks had
'such a kind of music none can doubt. But the
'question is not concerning this kind of polyodia,
'but whether they had compositions for several
'voices, framed according to the rules of art. I have
'taken great pains to be satisfied in this matter; and
'as in none of the Greek and Latin writers I have
'met with, any mention is made of this kind of music,
'it seems to me that either they were ignorant of it,

'or that they did not make use of it, as imagining
'perhaps that it interrupted the melody, and took
'away from the energy of the words; as to the term
'*Harmonici concentus*, it is only to be understood of
'the agreement between the voice and the sound of
'the instrument.

'Those who attempt to prove from Euclid that the
'ancients did compose music in really different parts,
'do not seem to understand his meaning; for when
'he mentions the four parts of a song, *ἀγωγή, τὸνῃ*,
'*πεττεία, πλοκή*, he does not thereby mean the four
'polyodical parts of cantus, altus, tenor, and bass,
'but so many different affections of the voice, certain
'harmonical figures or tropes, whereby the song
'acquired a particular beauty and grace; for what
'else can the word *Ἀγωγή* mean than a certain transi-
'tion of the voice from some given sound to another
'that is related to it. *Τὸνῃ* signifies a certain stay or
'dwelling on a sound; *Πλοκή*, or implication, is a
'particular species or colour of the *Ἀγωγή*, as *Πεττεία*,
'frisking or playing on, is of *Τὸνῃ*: what the *Ἀγωγή*
'is to *Τὸνῃ*, such is the *Πλοκή* to the *Πεττεία*.

'Some imagine that the ancients had a polyodical
'instrumental music from the diversity of their pipes;
'and are of opinion that at least an organical or
'instrumental harmony or symphony, regulated by
'art, was in use among the ancients, because their
'authors make mention of certain pipes, some of
'which were termed *Παρθενιοί*, or fit for girls; some
'*Παιδικοί*, or fit for boys; some *Τελιοί*, as being in a
'mean between the acute and grave sounds; and
'others *Υπερτελίοι*, as agreeing with the grave. The
'better to clear up this doubt, we must consider the
'organical polyodia as twofold, natural and artificial;
'and both these I make no doubt were in use as well
'as the vocal polyodia; for it is very probable that
'such as played on those pipes, becoming skilful by
'such practice, invented certain symphonies adapted
'to their purpose, and which they played on their
'public festivals, distributing themselves into certain
'chorusses. Symphonies of this sort are at this time
'to be heard among the country people, who, though
'ignorant of the musical art, exhibit a symphony,
'such a one as it is, on their flutes and pipes of
'different sizes, and this merely through the judgment
'of their ear; and it is also probable that the ancient
'Hebrews by this means alone became enabled to
'celebrate the praises of God on so many Cornua,
'Fistulæ, Litui, Tubæ, Buccinæ, as they are said to
'have been used at once in their temple; and I
'remember to have heard the Mahometan slaves in
'the island of Malta exhibit symphonies of this kind.
'An affection therefore of the polyodia is implanted
'in the nature of man; and I doubt not but that the
'ancients knew and practised it in the manner above
'related: but though I have taken great pains in my
'researches, I could never find the least sign of their
'having any artificial organical Melothesia of many
'parts; which, had they been acquainted with it,
'they would doubtless have mentioned, it being so
'remarkable a thing. What Boetius, Ptolemy, and
'others speak concerning harmony, is to be under-
'stood only as to a single voice, to which an instru-

'ment was joined; add to this that the ancients acknowledged no other concords than the diapason, 'the diapente, and the diatessaron, and such as were 'composed of them; for they did not reckon as now, 'the ditone, semiditone, and hexachord among the 'consonances. It therefore follows that the ancient 'Greeks acknowledged nothing more than the Monodia, adapted, it must be confessed, with much care 'and the greatest art to the sound of the lyre or the 'tibia; so that nothing was deficient either in the 'variety of the modulation, the sweetness of the 'singing, the justness of the pronunciation, or the 'gracefulness of the body in all its gestures and 'motions: and I imagine that the lyre of many 'strings was sounded in a harmonical concentus to 'the voice, in no other manner than is used in our 'days.*

Dr. Wallis has given his opinion on this important question in terms that seem decisive; for speaking of the music of the ancients he makes use of these words:—

'We are to consider that their music, even after it 'came to some good degree of perfection, was much 'more plain and simple than ours now-a-days. They 'had not concerts of two, three, four, or more parts 'or voices, but one single voice, or single instrument 'a-part, which to a rude ear is much more taking 'than more compounded music; for that is at a pitch 'not above their capacity, whereas this other 'founds it with a great noise, but nothing distinguish- 'able to their capacity.† And again in the same paper he says: 'I do not find among the ancients 'any footsteps of what we call several parts or voices ' (as bass, treble, mean, &c. sung in concert), answering 'to each other to complete the music.' And in the Appendix to his edition of Ptolemy, pag. 317, he expresses himself on the same subject to this purpose:—'But that agreement which we find in the 'modern music, of parts (as they term it) or of two, 'three, four, or more voices (singing together sounds 'which are heard altogether), was entirely unknown 'to the ancients, as far as I can see.'

From the several passages above-cited, it appears that the question, whether the ancients were acquainted with music in consonance or not, has been frequently and not unsuccessfully agitated, and that the arguments for the negative seem to preponderate. Nevertheless the author of a book lately published, entitled 'Principles and Power of Harmony,' after taking notice that Dr. Wallis, and some others, maintained that the ancients were strangers to symphonic music, has, upon the strength of a single passage in Plato, been hardy enough to assert the contrary: his words are these:—

'The strongest passage which I have met with in 'relation to this long-disputed point, is in Plato; a 'passage which I have never seen quoted, and which 'I shall translate: "Young men should be taught to 'sing to the lyre, on account of the clearness and 'precision of the sounds, so that they may learn to 'render tone for tone. But to make use of different

'simultaneous notes, and all the variety belonging to 'the lyre, this sounding one kind of melody, and the 'poet another—to mix a few notes with many, swift 'with slow, grave with acute, consonant with dis- 'sonant, &c. must not be thought of, as the time 'allotted for this part of education is too short for 'such a work." Plat. 895. I am sensible that 'objections may be made to some parts of this trans- 'lation, as of the words *πυκνότης*, *μανότης*, and 'αντίφωνοις, but I have not designedly disguised 'what I took to be the true sense of them, after due 'consideration. It appears then upon the whole, that 'the ancients were acquainted with music in parts, 'but did not generally make use of it.†

Whoever will be at the pains of comparing the discourse of Dr. Wallis, above-cited, and his appendix to Ptolemy, with the several paragraphs in the Principles and Power of Harmony, relating to the question in debate, and calculated, as the author professes, to vindicate the Greek music, will discover in the one the modesty of a philosopher, and in the other the arrogance of a dogmatist.

Opinions delivered in terms so positive, and indeed so contemptuous, as this latter writer has chosen to make use of,§ are an affront to the understandings of mankind, who are not to be supposed ready to acquiesce in the notions of others merely because they are propagated with an unbecoming confidence: and as to the judgment of this author on the question in debate, the least that can be said of it is, that it is founded in mistake and ignorance of his subject; for, first, it is very strange, seeing how much the powers of harmony exceed those of mere melody, that the ancients, when once they had found themselves in possession of so valuable an improvement as symphonic music, should ever forego it. The moderns in this respect were wiser than their teachers, for no sooner did they discover the excellence of music in parts than they studied to improve it, and have cultivated it with great care ever since. Secondly, this writer, in support of his opinion, has been driven to the necessity of translating those words of his author which he thinks make most for his purpose, in a manner which he confesses is liable to objections, and into such English phrase as, in the opinion of many,

† Principles and Power of Harmony, p. 133. The speech in the original, containing the passage of which it is pretended that above is a translation, is here given at length, as it stands in the edition of Plato, by Marsilius Ficinus; which is what this author appears to have made use of:—*Τῶν τοίνυν διὰ χάριν τοῖς φθόγγοις τῆς λύρας προσχρῆσθαι, σαφηνείας ἕνεκα τῶν χορδῶν, τὸν τε κιθαρῖσθην ἃ τὸν παιδευόμενον, ἀποδιδόντας πρόσχωρδα τὰ φθέγματα τοῖς φθέγμασι τὴν δ' ἑτεροφωνίαν ἃ ποικιλίαν τῆς λύρας, ἄλλα μὲν μέλη τῶν χορδῶν ἰσῶν, ἄλλα δὲ τε τὴν μελωδίαν ἐνυθύντος ποιητῆ· ἃ δὴ ἃ πυκνότητα μανότητι, ἃ τάχος βραδύτητι, ἃ δξύτητα βαρύτητι, σύμφωνον ἃ ἀντίφωνον παρεχομένους, ἃ τῶν ῥυθμῶν, ὡσαύτως παντοδαπὰ ποικίλματα προσαρμόττοντας τοῖσι φθόγγοις τῆς λύρας· πάντα ἢ τὰ τοιαῦτα μὴ προσφέρειν τοῖς μίλλαισιν ἐν τρισὶν ἡρεσι τὸ τῆς μουσικῆς χρήσιμον ἐκλήψεσθαι διὰ τάχως· τὰ γὰρ ἰναντία, ἄλλα τὰ τὰρᾶντοντα ἐνσυσμαθίαν παρέχει· δαί δὲ ὅτι μάλιστα ἐνσυσμαθεῖς εἶναι τες νέες.*

§ As where he insinuates a resemblance between those who doubt the truth of his assertions and the most ignorant of mankind, in these words: 'If all these circumstances are not sufficient to gain our belief, merely because we moderns have not the same musical power, then 'have the Kamschatkans a right to decide that it is impossible to foretell 'an eclipse, or to represent all the elements of speech by about twenty- 'four marks.'

* Musurg. tom. 1. pag. 537, et seq.

† Abridgment of Philosoph. Transactions by Lowthorp and Jones, vol. I. pag. 618.

is not intelligible. Thirdly and lastly, this very passage of Plato, upon which he lays so much stress, was discovered about fifty years ago, and adduced for the very purpose for which he has cited it, by Mons. l'Abbé Fraguier, a member of the Academy of Inscriptions and Belles Lettres, and occasioned a controversy, the result whereof will presently be related.

Monsieur Fraguier had entertained a high opinion of the Greek music, and a belief that the ancients were acquainted with music in consonance; in support of which latter opinion he produced to the academy the passage above-cited, which is to be found in Plato de Legibus, lib. VII.* He also produced for the same purpose a passage in Cicero de Republica, and another from Macrobius, both which are given in the note subjoined.†

The arguments deduced by Mons. Fraguier from these several passages, were learnedly refuted by Mons. Burette, a member also of the academy: and as to the interpretations which Mons. Fraguier had put upon them, the same Mons. Burette demonstrated that they were forced and unwarranted, either by the context or the practice of the ancients.

The substance of these arguments is contained in a paper or memoir entitled *Examen d'un Passage de Platon sur la Musique*, which may be seen in the History of the Academy of Inscriptions, tom. III. pag. 118. This question was farther prosecuted by the same parties, as appears by sundry papers in the subsequent volumes of the History and Memoirs of the above Academy; and in the course of the controversy the passages above-cited from Aristotle, Seneca, Cassiodorus, and others, were severally insisted on. As to those from Cicero and Macrobius, and this from Horace,

Sonante mistum tibiis carmen lyra,
Hac Dorium, illis Barbarum.

Ad Mæcenat. Epod. ix.

which had formerly been adduced for the same purpose, they went but a very little way towards proving the affirmative of the question in debate. Mons. Burette took all these into consideration; he admits, that the ancients made use of the octave and the fifteenth, the former in a manner resembling the drone of a bag-pipe; and he allows that they might accidentally, and without any rule, use the fourth and fifth; but this is the farthest advance he will allow the ancients to have made towards the practice of symphonic music; for as to the imperfect consonances and the dissonances, he says they were ignorant of the use and application of all of them in harmony: and finally he demonstrates, by a variety

* In Stephens's edition it is pag. 812, and in that of Marsilius Ficinus 895.

† Ut in fidibus, ac tibiis atque cantu ipso, ac vocibus concentus est quidam tenendus ex distinctis sonis, quem immutatum ac discrepantem saures erudite ferre non possunt; isque concentus ex dissimilimarum vocum moderatione concors tamen efficitur et congruens: sic ex summa, et infima, et mediis interjectis ordinibus, ut sonis, moderata ratione civitas, consensu dissimiliorum concinit; et quæ harmonia a musicis dicitur in cantu, ea est in civitate concordia. Cicero lib. II. de Repub. Fragm. pag. 527, tom. III.

Vides quam multorum vocibus chorus constet una tamen ex omnibus redditur. Aliqua est illic acuta, aliqua gravis, aliqua media: accedunt viris feminæ: interponuntur fistula. Ita singulorum illic latent voces, omnium apparent, et fit concentus ex dissonis.—Macrobius Saturnaliorum Proem.

of arguments, that the ancients were absolute strangers to music in parts.‡

Martini, in his *Storia della Musica*, vol. I. pag. 172, has given an abridgement of this controversy, as it lies dispersed in the several volumes of the Memoirs of the Academy of Inscriptions, and acquiesces in the opinion of Mons. Burette, who, upon the whole, appears to have so much the advantage of his opponents, that it is highly probable this dispute will never be revived.

To speak of the ancient Greek music in general, those who reflect on it will be inclined to acquiesce in the opinion of Dr. Wallis, who says, he takes it for granted, 'that much of the reports concerning the great effects of music in former times, beyond what is to be found in latter ages, is highly hyperbolic, and next door to fabulous; and therefore, he adds, great abatements must be allowed to the eulogies of their music.' Certainly many of the relations of the effects of music are either fabulous or to be interpreted allegorically, as this in Horace:—

Silvestres homines sacer interpresque Deorum,
Cædibus & victu fædo deterruit Orpheus;
Dictus ob hoc lenire tigres rabidosque leones.
Dictus & Amphion, Thebanæ conditor Arcis,
Saxa movere sono testudinis, & prece blanda.
Ducere quo vellet.

ARTE POETICA, lib. II. l. 391.

The wood-born race of men, when Orpheus tam'd,
From acorns and from mutual blood reclaim'd,
This priest divine was fabled to assuage
The tiger's fierceness, and the lion's rage.
Thus rose the Theban wall; Amphion's lyre
And soothing voice the list'ning stones inspire.

FRANCIS.

Hyperbolic expressions of the power and efficacy of music signify but little; for these convey nothing more than the ideas of the relator: and every man speaks in the highest terms he can invent of that, whatever it be, that has administered to him the greatest delight. How has the poet, in the Prolusions of Strada, laboured in describing the contest between the nightingale and the lutenist! and what does that celebrated poem contain, but a profusion of words without a meaning?

To conclude, every one that understands music is enabled to judge of the utmost effects of a single pipe, by hearing the flute, or any other single stop, finely touched on the organ: and as to the lyre, whether of three, four, seven, or ten strings, it is impossible but that it must have been greatly inferior to the harp, the lute, and many other instruments in use among the moderns.

Having taken a view of the state of music in the

‡ The learned Dr. Jortin, who, with the character of a very worthy man and a profound scholar, possessed that of a learned musician, has delivered his sentiments on this question in the following terms:—'One would think that an ancient musician, who was well acquainted with concords and discords, who had an instrument of many strings or many keys to play upon, and two hands and ten fingers to make use of, would try experiments, and would fall into something like counterpoint and composition in parts. In speculation nothing seems more probable, and it seemed more than probable to our skilful musician Dr. Pepusch, when I once conversed with him upon the subject; but in fact it doth not appear that the ancients had this kind of composition, or rather it appears that they had not; and it is certain, that a man shall overlook discoveries which stand at his elbow, and in a manner intrude themselves upon him.' Letter to Mr. Avison, published in the second edition of his Essay on Musical Expression, pag. 36.

earlier ages of the world, and traced the ancient system from its rudiments to its perfection, and thereby brought it down to nearly the close of the third century, we shall proceed to relate the several subsequent improvements that have from time to time been made of it, in the order in which they occurred; and shew to whom we owe that system, which for its excellence is now universally adopted by the civilized world.

We have seen that hitherto the science of music, as being a subject of very abstracted speculation, and as having a near affinity with arithmetic and geometry, had been studied and taught by such only as were eminent for their skill in those sciences: of these the far greater number were Greeks, who, in the general estimation of mankind, held the rank of philosophers. The accounts hereafter given of the Latin writers, such as Martianus Capella, Macrobius, Cassiodorus, and others, will shew how little the Romans contributed to the improvement of music; and in general their writings are very little more than abridgements of, or short commentaries on the works of Nicomachus, Euclid, Aristides Quintilianus, Aristoxenus, and others of the ancient Greeks. As to Boetius, of whom we shall speak hereafter, it is clear that his intention was only to restore to those barbarous times in which he lived, the knowledge of the true principles of harmony, and to demonstrate, by the force of mathematical reasoning, the proportions and various relations to each other, of sounds; in the doing whereof he evidently shews himself to have been a Pythagorean. As this was the design of his treatise *De Musica*, we are not to wonder that the author has said so little of the changes that music underwent among the Latins, or that he does but just hint at the disuse of the enarmonic and chromatic genera, and the introduction of the Roman characters in the room of the Greek.

It must however be admitted, that for one improvement of the system we are indebted to the Latins, namely, the application of the Roman capital letters to the several sounds that compose the scale, whereby they got rid of that perplexed method of notation invented by the Greeks: we have seen, by the treatise of Alypius, written professedly to explain the Greek musical characters, to what an amazing number they amounted, 1240 at the lowest computation; and after all, they were no better than so many arbitrary marks or signs placed on a line over the words of the song, and, having no real inherent or analogical signification, must have been an intolerable burthen on the memory. These the Latins rejected, and in their stead introduced the letters of their own alphabet, A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, fifteen in number, and sufficient to express every sound contained in the diadapason. If it be asked, how could this small number serve the purpose of more than 1200? the answer is, that this amazing multiplicity of characters arose from the necessity of distinguishing each sound with respect to the genus, and also the mode in which it was used; and before this innovation of the Romans, we are assured, that both the enarmonic and chromatic genera were

grown out of use, and that the diatonic genus, on account of its sweetness and conformity to nature, was retained amongst them: and as to the modes, there is great reason to suspect, that even at the time when Ptolemy wrote, the doctrine of them was but ill understood; fifteen characters, we know, are at this time sufficient to denote all the sounds in a diatonic diadapason, and consequently must have been so then.

It has already been observed, that the science of harmony was anciently a subject of philosophical enquiry; and it is manifest, from the account herein before given of them and their writings, that the Greeks treated it as a subject of very abstract speculation, and that they neither attended to the physical properties of sound, nor concerned themselves with the practice of music, whether vocal or instrumental. Ptolemy was one of the last of the Greek harmonicians; and from his time it may be observed, that the cultivation of music became the care of a set of men, who, then, at least, made no pretensions to the character of philosophers. This may be accounted for either by the decline of philosophy about this period, or by the not improbable supposition, that the subject itself was exhausted, and that nothing remained but an improvement in practice on that foundation which the ancient writers, by their theory, had so well laid. But whatever may have been the cause, it is certain, that after the establishment of Christianity the cultivation of music became the concern of the church: to this the Christians were probably excited by the example of the Jews, among whom music made a considerable part of divine worship, and the countenance given to it in the writings of St. Paul. Nor is it to be wondered at by those who consider the effects of music, its influence on the passions, and its power to inspire sentiments of the most devout and affecting kind, if it easily found admittance into the worship of the primitive Christians: as to the state of it in the three first centuries, we are very much at a loss; yet it should seem from the information of St. Augustine, that in his time it had arrived at some degree of perfection; possibly it had been cultivating, both in the Eastern and Western empire, from the first propagation of Christianity. The great number of men who were drawn off from secular pursuits by their religious profession, amidst the barbarism of the times, thought themselves laudably employed in the study of a science which was found to be subservient to religion: while some were engaged in the oppugning heretical opinions, others were taken up in composing forms of devotions, framing liturgies; and others in adapting suitable melodies to such psalms and hymns as had been received into the service of the church, and which made a very considerable part of the divine offices: all which is the more probable, as the progress of human learning was then in a great measure at a stand.

But as the introduction of music into the service of the church seems to be a new æra, it is necessary to be a little more particular, and relate the opinions of the most authentic writers, as well as to the reception it at first met with, as its subsequent progress

among the converts to Christianity. If among the accounts to be given of these matters, some should carry the appearance of improbability, or should even verge towards the regions of fable, let it be remembered, that very little credit would be due to history, were the writer to suppress every relation against the credibility whereof there lay an objection. History does not propose to transmit barely matters of real fact, or opinions absolutely irrefragable; falsehood and error may very innocently be propagated, nay, the general belief of falsehood, or the existence of any erroneous opinion, may be considered as facts; and then it becomes the duty of a historian to relate them. Whoever is conversant with the ecclesiastical historians must allow that the superstition of some, and the enthusiasm of others of them, have somewhat abated the reverence due to their testimony. But notwithstanding this, the characters of Eusebius, Socrates, Sozomen, Theodoret, and Evagrius, for veracity and good intelligence, stand so high in the opinion of all sober and impartial men, that it is impossible to withhold our assent from the far greater part of what they have written on this subject.

The advocates for the high antiquity of church-music urge the authority of St. Paul in its favour, who, in his Epistle to the Ephesians, charges them to speak to themselves in psalms, and hymns, and spiritual songs, singing and making melody in their hearts to the Lord;* and who exhorts the Colossians to teach and admonish one another in psalms, hymns, and spiritual songs.† Cardinal Bona is one of these; and he scruples not to assert, on the authority of these two passages, that songs and hymns were, from the very establishment of the church, sung in the assemblies of the faithful. Johannes Damascenus goes farther back; and relates, that at the funeral of the Blessed Virgin, which was celebrated at Gethsemane, the apostles, assisted by angels, continued singing her requiem for three whole days incessantly. The same author, speaking of the ancient hymn called the Trisagion, dates its original from a miracle that was performed in the time of Proclus, the archbishop: his account is, that the people of Constantinople being terrified with some portentous signs that had appeared, made solemn processions and applications to the Almighty, beseeching him to avert the calamities that seemed to threaten their city, in the midst whereof a boy was caught from among them, and taken up to heaven; who, upon his return, related, that he had been taught by angels to sing the hymn, in Greek,

Αγιος ο Θεος, αγιος ισχυρος, αγιος αθανατος, ελεησον ημας.
Holy God, holy and strong, holy and immortal, have mercy upon us.

The truth of this relation is questioned by some, who yet credit a vision of St. Ignatius; of which Socrates, the ecclesiastical historian, gives the following account: 'St. Ignatius, the third bishop of Antioch, in Syria, after the apostle Peter, who also conversed familiarly with the apostles, saw the blessed spirits above singing hymns to the Sacred

'Trinity alternately, which method of singing, says the same historian, Ignatius taught to his church; and this, together with an account of the miracle which gave rise to it, was communicated to all the churches of the East.'‡ Nicephorus, St. Chrysostom, Amalarius, and sundry others, acquiesce in this account of the origin of antiphonal singing; as do our countrymen, Hooker, Hammond, Beveridge, and Dr. Comber.

By the Apostolical Constitutions, said to have been, if not compiled by the apostles themselves, at least collected by Clement, a disciple of theirs, the order of divine worship is prescribed; wherein it is expressly required, that after the reading of the two lessons, one of the presbyters should sing a psalm or hymn of David; and that the people should join in singing at the end of each verse. It would be too little to say of this collection, that the authority of it is doubted, since it is agreed, that it did not appear in the world till the fourth century; and the opinions of authors are, that either it is so interpolated as to deserve no credit, or that the whole of it is an absolute forgery.

Hitherto, then, the high antiquity of church-music stands on no better a foundation than tradition, backed with written evidence of such a kind as to have scarce a pretence to authenticity: there are, however, accounts to be met with among the writers of ecclesiastical history, that go near to fix it at about the middle of the fourth century.

In short, the æra from whence we may reasonably date the introduction of music into the service of the church, is that period during which Leontius governed the church of Antioch; that is to say, between the years of Christ 347 and 356, when Flavianus and Diodorus, afterwards bishops, the one of Antioch and the other of Tarsus, divided the choristers into two parts, and made them sing the Psalms of David alternately, Theodoret. Hist. Eccl. lib. II. cap. xxiv.; a practice, says the same author, which began first at Antioch, and afterwards spread itself to the end of the world. Valesius acquiesces in this account, and professes to wonder whence Socrates had the story of Ignatius's vision, Vales. in Socrat. lib. VI. cap. viii. The occasion of antiphonal singing seems to have been this: Flavianus and Diodorus, although then laymen, but engaged in a monastic life, were in great repute for their sanctity; and Leontius, their bishop, was an avowed Arian, whom they zealously opposed: in order to draw off the people from an attendance on the bishop, who, in the opinion of Flavianus and Diodorus, was a preacher of heresy, they set up a separate assembly for religious worship, in which they introduced antiphonal singing, which so captivated the people, that the bishop, to call them back again, made use of it also in his church. Flavianus, it seems, had a high opinion of the efficacy of this kind of music; for it is reported, that the city of Antioch having, by a popular sedition, incurred the displeasure of the Emperor Theodosius, sent Flavianus to appease him, and implore forgiveness; who, upon his first audience,

* Chap. v. verse 19.

† Chap. iii. verse 16.

‡ Hist. Eccles. lib. VI. cap. viii.

though in the imperial palace, directed the usual church-service to be sung before him: the emperor melted into pity, wept, and the city was restored to his favour. Other instances are to be met with in history, that show the fondness of the people of Antioch for this kind of music; and which favour the supposition, that amongst them it took its rise.

Antioch was the metropolis of Syria; the example of its inhabitants was soon followed by the other churches of the East; and in a very few ages after its introduction into the divine service, the practice of singing in churches not only received the sanction of public authority, but those were forbidden to join in it who were ignorant of music. For at the council of Laodicea, held between the years of Christ, 360 and 370, a canon was made, by which it was ordained, That none but the canons, or singing men of the church, which ascend the Ambo,* or singing-desk, and sing out of the parchment, [so the words are] should presume to sing in the church. Balsamon seems to think that the fathers intended nothing more than to forbid the setting or giving out the hymn or psalm by the laity: but the reason assigned by Baronius for the making of this canon, shews that it was meant to exclude them totally from singing in the church-service; for he says that when the people and the clergy sang promiscuously, the former, for want of skill, destroyed the harmony, and occasioned such a discord as was very inconsistent with the order and decency requisite in divine worship. Zonanus confirms this account, and adds, that these canonical singers were reckoned a part of the clergy.† Balsamon, in his scholia on this canon, says, that before the Laodicean council, the laity were wont, in contempt of the clergy, to sing, in a very rude and inartificial manner, hymns and songs of their own invention; to obviate which practice, it was ordained by this canon that none should sing but those whose office it was. Our learned countryman, Bingham, declares himself of the same opinion in his Antiquities of the Christian Church, book III. chap. vii. and adds, that from the time of the council of Laodicea the psalmistæ, or singers, were called *κανονικοι ψαλτραι*, or canonical singers, though he is inclined to think the provision in the canon only temporary.

CHAP. XXIII.

GREAT stress is also laid on the patronage given to church-music by St. Basil, St. Ambrose, and St. Chrysostom; as to the first, he had part of his education at Antioch, where he was a continual spectator of that pompous worship which prevailed there. He

* The Ambo was what we now call the reading-desk, a place made on purpose for the readers and singers, and such of the clergy as ministered in the first service called *Missæ Catechumenorum*. It had the name of Ambo, not as Walafridus Strabo imagines, 'ab ambiendo,' because it surrounded them that were in it, but from *αναβαίνειν*, because it was a place of eminency, to which they went up by degrees or steps. Bingham's Antiquities of the Christian Church, book VIII. chap. v. § 4.

† It seems they were one of the many orders in the primitive church, and that they received ordination at the hands, not of the bishop or chorilescopus, but of a presbyter, using this form of words, prescribed by the canon of the fourth council of Carthage: 'See that thou believe in thy heart what thou singest with thy mouth; and approve in thy works what thou believest in thy heart.' Bingham. Antiq. book III. chap. vii. § 4.

was first made a deacon by Meletius, and afterwards, that is to say about the year 371, was promoted to the bishopric of Cæsarea in Cappadocia, his own country; and in this exalted station he contracted such a love for church-music, as drove him to the necessity of apologizing for it.‡ In his epistle to the Neocæsarian clergy, still extant, he justifies the practice, saying, that the new method of singing, at which they were so offended, was now become common in the Christian church, the people rising before day and going to church, where, having made their confessions and prayers, they proceeded to the singing of psalms: and he adds, that in his holy exercise, the choir being divided into two parts, mutually answered each other, the precentor beginning, and the rest following him. He farther tells them, that if to do thus be a fault, they must blame many pious and good men in Egypt, Lybia, Palestine, Arabia, Phœnicia, and Syria, and sundry other places. To this they urged that the practice was otherwise in the time of their bishop Gregory Thaumaturgus; in answer to which Basil tells them, that neither was the Litany used in his time; and that in objecting to music, while they admitted the Litany, they strained at a gnat and swallowed a camel.

St. Chrysostom, whose primitive name was John, was a native of Antioch, and received his education there, he was ordained a deacon by Meletius, and presbyter by Flavianus; and having been accustomed to the pompous service introduced by the latter into the Church of Antioch, he conceived a fondness for it. When he became bishop of Constantinople, which was about A. C. 380, he found occasion to introduce music among his people: the manner of his doing it is thus related: The Arians in that city were grown very insolent: they held conventicles at a small distance without the walls; but on Saturdays and Sundays, which were set apart for the public assemblies, they were wont to come within the city, where, dividing themselves into several companies, they walked about the porticos, singing such words as these: 'Where are they who affirm three to be one power?' and hymns composed in defence of their tenets, adding petulant reflexions on the orthodox;§ this they continued for the greatest part

‡ Vales. in Socrat. lib. IV. cap. xxvi.

§ It seems that the orthodox could in their turns not only be petulant, but industrious in provoking their enemies to wrath, as may be collected from the following relation of Theodoret:—

'Publia, the deaconess, a woman admired and celebrated for her piety, was the mother of the famous John, who for many years was first presbyter of the church of the Antioch, and though often and unanimously elected to the apostolic throne, refused that dignity. She, and a chorus of consecrated virgins with her, spent great part of their time in singing anthems and divine songs; and once when the emperor [Julian] had occasion to pass by them, they sung psalms chosen purposely to expose and ridicule the extravagancies of heathenism and idolatry, singing 'them with an exalted voice; and among the rest they applied, very properly to the occasion, the hundred and fiftieth, from the fourth to the eighth verse, "Their idols are silver and gold, even the work of men's hands, &c." "Let those that make them be like unto them, and also all such as put their trust in them." This so disturbed the emperor, that he commanded silence should be kept whenever he came by that place, but to so little purpose, that upon his returning, at the motion of Publia they gave him another welcome in these words:—"Let God arise, and let his enemies be scattered." And now his anger was raised so high, that he ordered the chantage to be brought before him, and had her beat on the face till her cheeks were stained with blood; which efforts of the tyrant's unmanly passion the aged good woman received with pleasure, went home, and, as often as an opportunity offered, entertained him still with the very same sort of disagreeable compositions.' Hist. Eccles.

of the night; in the morning they marched through the heart of the city, singing in the same manner, and so proceeded to the place of their assembly. In opposition to these people, St. Chrysostom caused hymns to be sung in the night; and to give his performance a pomp and solemnity, which the other wanted, he procured crosses of silver to be made at the charge of the empress Eudoxia, which, with lighted torches thereon, were borne in a procession, at which Briso, the empress's eunuch, officiated as precentor; this was the occasion of a great tumult, in which Briso received a wound in the forehead with a stone, and some on both sides were slain.* This was followed by a sedition, which ended in the expulsion of the Arians. This manner of singing, thus introduced by them, was, as Sozomen relates,† used in Constantinople from that time forwards; however, in a short time it was performed in such an unseemly way as gave great offence; for the singers, affecting strange gestures and boisterous clamours, converted the church into a mere theatre; for which Chrysostom reproved them, by telling his people that their rude voices and disorderly behaviour were very improper for a place of worship, in which all things were to be done with reverence to that Being who observes the behaviour of every one there.

St. Ambrose, who had entertained a singular veneration for St. Basil, like him was a great lover of the church-service: it is true he was not originally an ecclesiastic, but having been unexpectedly elected bishop of Milan, he applied himself to the duties of the episcopal function. Justina, whom the emperor Valentinian had married, proving an Arian, commenced a prosecution against Ambrose and the orthodox; during which the people watched all night in the church, and Ambrose appointed that psalms and hymns should be sung there after the manner of the oriental churches, lest the people should pine away with the tediousness of sorrow; and from this event, which happened about 374, we may date the introduction of singing into western churches.

But the zeal of St. Ambrose to promote this practice, is in nothing more conspicuous than in his endeavours to reduce it into form and method; as a proof whereof, it is said that he, jointly with St. Augustine, upon occasion of the conversion and baptism of the latter, composed the hymn *Te Deum laudamus*, which even now makes a part of the liturgy of our church, and caused it to be sung in his church at Milan; but this has been discovered to be a mistake;‡ this however is certain, that he instituted that method of singing, known by the name of the *Cantus Ambrosianus*, or *Ambrosian*

Chant, a name, for ought that now appears, not applicable to any determined series of notes, but invented to express in general a method of singing agreeable to some rule given or taught by him. This method, whatever it was, is said to have had a reference to the modes of the ancients, or rather to those of Ptolemy, which we have shewn to have been precisely coincident with the seven species of the diapason; but St. Ambrose conceiving all above four to be superfluous, reduced them to that number, retaining only the Dorian, the Phrygian, the Lydian, and the Mixolydian,§ which names he rejected, choosing rather to distinguish them by epithets of number, as *protos*, *deuteros*, *tritros*, *tetrartos*. His design in this was to introduce a kind of melody founded on the rules of art, and yet so plain and simple in its nature, that not only those whose immediate duty it was to perform the divine service, but even the whole congregation might sing it; accordingly in the Romish countries the people now join with the choir in chanting the divine offices; and if we may credit the relations of travellers in this respect, this distinguished simplicity of the Ambrosian Chant is even at this day to be remarked in the service of the church of Milan, where it was first instituted.

A particular account of the ecclesiastical modes, as originally constituted by St. Ambrose, with the subsequent improvement of them by Gregory the Great, is reserved for another place: in the interim it is to be noted that the ecclesiastical modes are also called *tropes*, but more frequently *tones*; which latter appellation was first given to them by *Martianus Capella*, as we are informed by *Sir Henry Spelman*, in his *Glossary*, voce *FRIGIDORÆ*. The following scheme represents the progression in each:—

d	c	f	g
c	d	e	f
b	c	d	e
a	b	c	d
G	a	b	c
F	G	a	b
E	F	G	a
D	E	F	G

And this was the original institution of what are called, in contradistinction to the modes or moods of the ancients, the ecclesiastical modes or tones. These of St. Ambrose, however well calculated for use and practice, were yet found to be too much restrained, and not to admit of all that variety of modulation which the several offices in the church-service seemed to require; and accordingly St. Gregory, surnamed the Great, the first pope of that name, with the assistance of the most learned and skilful in the music of that day, set about an amendment of the *Cantus Ambrosianus*, and instituted what became known to later times by the name of the *Cantus Gregorianus*, or, the *Gregorian Chant*: but as this was not till near two hundred and thirty years after the time of St. Ambrose, the account of this, and the other improve-

* *Socrat. Hist. Eccles. lib. VI. cap. viii.*

† *Hist. Eccles. lib. VIII. cap. viii.*

‡ The very learned Dr. Usher, upon the authority of two ancient manuscripts, asserts the *Te Deum* to have been made by a bishop of Trier, named Nicetius or Nicettus, and that not till about the year 500, which was almost a century after the death both of St. Ambrose and St. Augustine. *L'Estrange's Alliance of Divine Offices*, 79. The Benedictines, who published the works of St. Ambrose, judge him not to have been the author of it; and Dr. Cave, though at one time he was of a different judgment, and bishop Stillingfleet, concur in the opinion that the *Te Deum* was not the composition of St. Ambrose, or of him and St. Augustine jointly. *Bingham's Antiquities of the Christian Church*, book XIV. chap. ii. § 9.

§ *Sir Henry Spelman in his Glossary, voce FRIGIDORÆ, in the place of the Mixolydian puts the Æolian.*

ments made in music by St. Gregory, must be referred to another place.

With respect to the music of the primitive church, though it consisted in the singing of psalms and hymns, yet was it performed in sundry different manners, that is to say, sometimes the psalms were sung by one person alone, the rest hearing with attention; sometimes they were sung by the whole assembly; sometimes alternately, the congregation being for that purpose divided into separate choirs; and, lastly, by one person, who repeated the first part of the verse, the rest joining in the close thereof.*

Of the four different methods of singing above enumerated, the second and third were very properly distinguished by the names of symphony and antiphony, and the latter was sometimes called *responsaria*;† and in this, it seems, women were allowed to join, notwithstanding the apostle's injunction on them to keep silence.

The method of singing in the last place above mentioned, clearly suggests the origin of the office of precentor of a choir, whose duty, even at this day, it is to govern the choir, and see that the choral service be reverently and justly performed.

It farther appears, that almost from the time when music was first introduced into the service of the church, it was of two kinds, and consisted in a gentle inflection of the voice, which they termed plain-song, and a more artificial and elaborate kind of music, adapted to the hymns and solemn offices contained in its ritual; and this distinction has been maintained through all the succeeding ages, even to this time.

Besides the reverend fathers of the church above-mentioned, we are told, and indeed it appears from many passages in his writings, that SAINT AUGUSTINE was a passionate lover of music; this which follows, taken from his *Confessions*, lib. IX. cap. vi. is the most commonly produced as an evidence of his approbation of music in the church-service, though, it must be owned, he lived to recant it: 'How abundantly did I weep before God, to hear those hymns of thine; being touched to the very quick, by the voices of thy sweet church song. The voices flowed into my ears, and thy truth pleasingly distilled into my heart; which caused the affections of my devotion to overflow, and my tears to run over; and happy did I find myself therein.' From hence there is little reason to doubt, that he enjoined the use of it to the clergy of his diocese. He wrote a treatise *De Musica*, in six books, chiefly, indeed, on the subject of metre and the laws of versification, but interspersed with such observations on the nature of the consonances, as shew him to have been very well skilled in the science of music.

It is not necessary to enter into a particular character, either of St. Augustine or of this his work:

* Bingham's *Antiq.* book XIV. chap. i.

† In this distinction between symphoniac and antiphonal psalmody, we may discern the origin of the two different methods of singing practised in the Roman and Lutheran churches, and of those that follow the rule of Calvin, and others of the reformers: in the former the singing is antiphonal, in the latter it is a plain metrical psalmody, in which all join; so that for each practice the authority of the primitive church may be appealed to.

those who are acquainted with ecclesiastical history need not be told, that he was a man of great learning, for the time he lived in, of lively parts, and of exemplary piety. To such, however, whose curiosity is greater than their reading, the following short account of this eminent father of the church may not be unpleasing:—

He was born at Thagaste, a city of Numidia, on the 13th of November, 354. His father, a burgess of that city, was called Patricius; and his mother, Monica, who being a woman of great virtue, instructed him in the principles of the Christian religion. In his early youth he was in the rank of the catechumens, and falling dangerously ill, earnestly desired to be baptized; but the violence of the distemper ceasing, his baptism was delayed. His father, who was not yet baptized, made him study at Thagaste, Madaura, and afterwards at Carthage. St. Augustine, having read Cicero's books of philosophy, began to entertain a love for wisdom, and applied himself to the study of the Holy Scriptures; nevertheless, he suffered himself to be seduced by the Manicheans. At the age of nineteen, he returned to Thagaste, and taught grammar, and also frequented the bar: he afterwards taught rhetoric at Carthage, with applause. The insolence of the scholars at Carthage made him take a resolution to go to Rome, though against his mother's will. Here also he had many scholars; but disliking them, he quitted Rome, and settled at Milan, and was chosen public professor of rhetoric in that city. Here he had opportunities of hearing the sermons of St. Ambrose, which, together with the study of St. Paul's Epistles, and the conversion of two of his friends, determined him to retract his errors, and quit the sect of the Manicheans: this was in the thirty-second year of his age. In the vacation of the year 386, he retired to the house of a friend of his, named Verecundus, where he seriously applied himself to the study of the Christian religion, in order to prepare himself for baptism, which he received at Easter, in the year 387. Soon after this, his mother came to see him at Milan, and invite him back to Carthage; but at Ostia, whither he went to embark, in order to his return, she died. He arrived in Africa about the end of the year 388, and having obtained a garden-plot without the walls of the city of Hippo, he associated himself with eleven other persons of eminent sanctity, who distinguished themselves by wearing leathern girdles, and lived there in a monastic way for the space of three years, exercising themselves in fasting, prayer, study, and meditation, day and night: from hence sprang up the Augustine friars, or eremites of St. Augustine, being the first order of mendicants; those of St. Jerome, the Carmelites, and others, being but branches of this of St. Augustine. About this time, or as some say before, Valerius, bishop of Hippo, against his will ordained him priest: nevertheless, he continued to reside in his little monastery, with his brethren, who, renouncing all property, possessed their goods in common. Valerius, who had appointed St. Augustine to preach in his place, allowed him to do it in his presence, contrary to the custom of the churches in

Africa. He explained the creed, in a general council of Africa, held in 393. Two years after, Valerius, fearing he might be preferred to be bishop of another church, appointed him his coadjutor or colleague, and caused him to be ordained bishop of Hippo, by Megalius, bishop of Calame, then primate of Numidia. St. Augustine died the 28th day of August, 430, aged seventy-six years, having had the misfortune to see his country invaded by the Vandals, and the city where he was bishop besieged for seven months.

The works of St. Augustine make ten tomes; the best edition of them is that of Maurin, printed at Antwerp, in 1700; they are but little read at this time, except by the clergy of the Greek church and in the Spanish universities; our booksellers in London receive frequent commissions for them, and indeed for most of the fathers, from Russia, and also from Spain.

About this time flourished AMBROSIUS AURELIUS THEODOSIUS MACROBIUS, an author whose name appears in almost every catalogue of musical writers extant; but whose works scarcely entitle him to a place among them. He lived in the time of Theodosius the younger, who was proclaimed emperor of the East, anno 402. He was a man of singular dignity, and held the office of chamberlain to the emperor. Fabricius makes it a question whether he was Christian or a Pagan. His works are a commentary on the *Somnium Scipionis* of Cicero, in two books, and *Saturnalia Convivia*, in seven books; in both which he takes occasion to treat of music, and more especially the harmony of the spheres. The chief of what he says concerning music in general is contained in his Commentary on the *Somnium Scipionis*, and is taken from Nicomachus, and others of the followers of Pythagoras. Martini mentions also a discourse on mundane music of his, which was translated into Italian by Ercole Bottrigari, with notes; but he speaks of it as a manuscript, and by the list of the works of Macrobius, it does not appear to have ever been printed.

Of such writers as Macrobius, and a few other of the Latins who will shortly be mentioned, that have written not professedly on music, but have briefly or transiently taken notice of it in the course of a work written with some other view than to explain it, little is to be said. There is nevertheless a Greek writer of this class, who lived some considerable time before Macrobius, and indeed was prior to Porphyry, the last of the Greek musical writers that deserves to be taken notice of, not so much because he has contributed to the improvement of the science, as because in a voluminous work of his there are interspersed a great variety of curious particulars relating to it, not to be found elsewhere. The author here meant is Athenæus the grammarian, called, by way of eminence, the Grecian Varro; he was born at Naucratis in Egypt, and flourished in the third century; of many works that he wrote, one only remains, intitled *The Deipnosophists*, that is to say, the Sophists at Table, where he introduces a number of learned men of all professions, who converse upon various subjects at the table of a Roman citizen

named Larensius. In this work there are many very pleasant stories, and an infinite variety of facts, citations, and allusions, which make the reading of it extremely delightful. The little that he has said of music lies scattered up and down in this work, which, with the Latin translation of it, makes a large folio volume.

In his fourth book, pag. 174, he gives the names of the supposed inventors of the ancient musical instruments, and, among others, of Ctesibus, and of the hydraulic organ constructed by him; and it is supposed that this is the most ancient and authentic account of that instrument now extant. He says, pag. 175, that the Barbiton or lyre, or, as Mersennus will have it, the viol, was the invention of Anacreon; and the Monaulon, or single pipe, of the Egyptian Osiris.

Elsewhere, viz., in his fourteenth book, he speaks of the power of music, and of the fondness which the Arcadians, above all other people, entertained for it: and in the same book, pag. 637, he describes that strange instrument, invented by Pythagoras Zacynthius, called the tripod lyre, corresponding in every particular with the description of it hereinbefore given from Blanchinus; to which may be added, that Athenæus expressly says that the three several sets of chords between the legs, were in their tuning adjusted to the three primitive modes, the Dorian, the Lydian, and the Phrygian.

Of this learned, curious, and most entertaining work, the best edition is that of Dalechamp, with the Greek original and Latin translation in opposite columns. To this are added the animadversions of Isaac Casaubon, which are very curious, and make another volume. In these it is said that the *Musica* *διαγράμματα*, or *Tablatura*, i. e., the art of writing or noting down of music, was invented by Stratoniceus of Rhodes. Is. Casaub. *Animadvers. in Athenæum*, lib. VIII. cap. xii.

MARTIANUS MINEUS FELIX CAPELLA was born, as Cassiodorus testifies, at Madaura, a town in Africa, situated between the countries of Getulia and Numidia, lived at Rome under Leo the Thracian, viz., about the year of Christ 457; he was the author of a work intitled, *De Nuptiis Philologiæ et Mercurii*, the style whereof, in the opinion of some, is harsh, and rather barbarous, though others, and Fabricius in particular, who terms it a delightful fable,* think it in nowise deserves such a character: this work, which consists of prose and verse intermixed, is in fact a treatise on the seven liberal sciences, and consequently includes a discourse on music, which makes the ninth book thereof, and is introduced in the following manner: the author supposes the marriage of Philologia, a virgin, to Mercury, and that Venus and the other deities, as also Orpheus, Amphion, and Arion, are assembled to honour the solemnity; the Sciences, who, to render the work as poetical as may be, are represented as persons, also attend, among whom is Harmonia, described as having her head decked with variety of ornaments, and bearing symbols of the faculty over which she is feigned to

* Biblioth. Lat. Art. CAPELLA.

preside. She is made to exhibit the power of sounds by such melody as Jupiter himself commends, which is succeeded by a request of Apollo and Minerva to unfold the mysteries of harmony. She first craves leave to relate that she formerly was an inhabitant of the earth, and that through the inspirations of Pythagoras, Aristoxenus, and others, she had taught men the use of the lyre and the pipe; and by the singing of birds, the whistling of the winds, and the murmuring of water-falls, had instructed even the artless shepherds in the rudiments of melody. That by the power of her art she had cured diseases, quieted seditions, and composed and tempered the irregular affections of mankind; notwithstanding all which, she had been contemned and reviled by those sons of earth, and had therefore sought the heavens, where she found the motions of the orbs regulated by her own principles. She then proceeds to explain the precepts of harmony in a short discourse, which, if we consider the substance and method rather than the style of it, must be allowed to be a very elegant composition, and by much the most intelligible of any ancient treatise on the science of music now extant.

Capella concludes this ninth book of his treatise *De Nuptiis* thus: 'When Harmonia had run over these things concerning songs, and the sweetness of verse, in a manner both august and persuasive, to the gods and heroes, who were very intent, she decently withdrew; then Jupiter rose up, and Cymesis modulating in divine symphonies, came to the chamber of the virgin, to the great delight of all.'

The above discourse of Martianus Capella is manifestly taken from Aristides Quintilianus, of which, to say the truth, it is very little more than an abridgment, but it is such a one as renders it in some respects preferable to the original; for neither is it so prolix as Quintilian's treatise, nor does it partake of that obscurity which discourages so many from the study of his work; and when it is said, as it has been by some, that the style of Capella is barbarous, this must be taken as the opinion of grammarians, who, without regarding the intrinsic merit of any work, estimate it by certain rules of classical elegance, which they themselves have established as the test of perfection. It is by these men, and for this reason, and perhaps because he had not the good fortune to be born at Rome, that Capella is termed a semi-barbarian, and his writings reprobated as unworthy the perusal of men of science.* But, notwithstanding these opinions, one of the best grammarians of the present age, the learned and ingenious

author of *Hermes*, or a *Philosophical Inquiry* concerning Universal Grammar, has forborne to pass a censure of barbarity on the style of this author: his sentiment of him is, that he was rather a philologist than a philosopher; a testimony that leaves him a better character than some of those deserve who have been so liberal in their censures of him. It has been said above, that Fabricius has given to the treatise *De Nuptiis* the character of a delightful fable; and Gregory of Tours delivers his opinion of it at large in the following words: 'In grammaticis docent legere, in dialecticis altercationum propositiones advertere, in rhetoricis persuadere, in geometricis terrarum linearumque mensuras colligere, in astrologicis cursus siderum contemplari, in arithmeticis numerorum partes colligere, in harmoniis sonorum modulationes suavius accentuum carminibus concrepare.' Hence it may seem that Mr. Malcolm was rather too hasty in condemning this work; and that in pronouncing of its author as he has done in his *Treatise on Music*, pag. 498, that he was but a sorry copier from Aristides, he has done him injustice. Of Capella's work, *De Nuptiis Philologiæ et Mercurii*, there have been many editions; that of Meibomius is the most useful to a musician; but there is a very good one, with corrections and notes, by Grotius, in octavo, published in 1559, when he was but fourteen years of age.

CHAP. XXIV.

THE several works hereinbefore enumerated contain the whole of what, in the strict sense of the term, we are to understand by the ancient system of music; and as many of them appear to be of very great antiquity, we are to esteem it a singular instance of good fortune that they are yet remaining; that they are so, is owing to the care and industry of very many learned men, who, from public libraries, and other repositories, have sought out the most correct manuscripts of the respective authors, and given them to the world in print; As to Aristoxenus, the first in the list of the harmonical writers, it is doubtful whether his *Elements* ever appeared in print, till near the middle of the seventeenth century, inasmuch as Morley, who lived in the reign of our queen Elizabeth, and was a very learned and inquisitive man in all matters relating to musical science, professes never to have seen the *Elements* of Aristoxenus; Euclid indeed had been published in the year 1498, in a Latin translation of Georgius Valla, of Placentia, but under the name of Cleonidas, It was also, in 1557, published at Paris in Greek, with a new Latin translation by Johannes Pena, mathematician to the French king, but in a very incorrect manner; other editions were also published of it, in which the errors of the former were multiplied. At length, with the assistance of our countrymen Selden, and Gerard Langbaine, Marcus Meibomius, a man well acquainted with the science, and well skilled in Greek literature, published it, together with Aristoxenus Nicomachus, Alypius, Gaudentius, Bacchius Senior, Aristides Quintilianus,

* The learned bishop of Avranches is somewhat less severe in his censure. He gives the following character of Capella and his work:—'Martianus Capella has given the name of satire to his work because it is written in verse and prose, and the profitable and entertaining parts are agreeably interwoven. His design is to treat of the arts, which have the appellation of liberal; and these he represents by certain allegorical personages, with attributes proper to each. The principal action in this fable is the marriage of Mercury and Philology, a feigned being, intended to signify the love of literature. The artifice of this allegory is not very subtle, and as to the style it is barbarism itself; and for the figures, they are unparadonably bold and extravagant; besides all which it is so obscure as hardly to be intelligible; otherwise it is learned, and full of notions not common. Some write that the author was an African; if he was not, his harsh and forced style would induce one to believe he was of that country. The time he lived in is unknown; it only appears that he was more ancient than Justinian.' Huetius de l'Origine des Romains.

and the ninth book of the fable de Nuptiis Philologiæ et Mercurii of Martianus Capella, with a Latin translation of the first seven of the above-named writers, a general preface replete with excellent learning, and copious notes on them all.

Besides the general preface, Meibomius has given a particular one to each author as they stand in his edition, which prefaces, as they contain a variety of particulars relating to the respective authors and their works, and are otherwise curious, are well worthy of attention. The Manual of Nicomachus was first published and translated into Latin by Meibomius, who gives the author a very great character, and with great ingenuity fixes the time when he lived; for he observes that Nicomachus in the course of his work mentions Thrasyllus, who he says he thinks to be the same with one of that name mentioned frequently by Suetonius in Augustus and Tiberius, and by the old commentator on Juvenal, Sat. VI. as a famous mathematician; and from hence he infers that he lived after the time of Augustus.

To the Isagoge of Alypius the preface is but very short, but in that to Gaudentius, which follows it next in order Meibomius cites a passage from Cassiodorus, a Latin writer on music, who flourished in the fifth century, and will presently be spoken of, from whence he thinks the age when Alypius lived may in some measure be learned. He observes also that it appears from the same passage of Cassiodorus that Gaudentius had been translated into Latin by a Roman, a friend of his, named Mutianus;* the whole passage, to give it together as it stands in Cassiodorus, is in these words: 'Gratissima ergo nimis utilisque cognitio, quæ et sensum nostrum ad superna erigit, et aures modulatione permulcet: quam apud Græcos Alypius, Euclides, Ptolemæus, et cæteri probabili institutione, docuerunt. Apud Latinos autem vir magnificus Albinus librum de hac re, compendio, sub brevitate conscripsit, quem in bibliotheca Romæ non habuisse atque studiosè legisse retinemus. Qui si forte gentili incursione sublatus est, habetis hic Gaudentium Mutiani Latinum: quem si sollicita intensione legitis, hujus scientiæ vobis atria patefacit. Fertur etiam latio sermone et Apuleium Madaurensam instituta hujus operis effecisse, scripsit etiam et pater Augustinus de Musica sex libros, in quibus humanam vocem, rhythmicos sonos, et harmoniam modulabilem in longis syllabis atque brevibus naturaliter habere monstravit. Censorinus quoque de accentibus vocis nostræ ad necessariæ subtiliter disputavit, pertinere dicens ad musicam disciplinam: quem vobis inter cæteros transcriptum reliquit.' Cassiod. de Musica.

Gaudentius is published from a manuscript, which the editor procured of his friends Selden and Langbaine, who collated it for him, with two others which had been presented to the Bodleian library, the one by Sir Henry Savil, and the other by William, Earl of Pembroke, formerly chancellor of the university of Oxford. It seems that our countryman Chilmead had undertaken to publish an edition of Gaudentius, but being informed that Meibomius had entertained

a design of giving it to the world, he generously sent him his papers, and remitted the care of publishing them to him.

Bacchius Senior was first published in the original Greek, and with a French translation by Mersennus, in a commentary on certain chapters in the book of Genesis, written by him to explain the music of the ancient Hebrews and Greeks, intitled 'Questiones et Explicatio in sex priora capita Geneseos, quibus etiam Græcorum et Hebræorum Musica instauratur.' Of this translation Meibomius, in his general preface, speaks in very severe terms; he says he did not know that any such was extant, till he was informed thereof by his friend Ismael Bullialdus; he says that he then had it brought to him from Paris by the courier, and that if he had seen it before he had published his notes on that author, they would have been made much fuller by observations on his errors. However the only error that Meibomius here charges Mersennus with, is that of having confounded the Stantes with the Mobiles in his representation of the Systema maximum.

Aristides Quintilianus is taken from a manuscript which Meibomius frequently mentions as belonging to Joseph Scaliger, in which was contained Alypius, Nicomachus, Aristoxenus, Aristides, and Bacchius. This manuscript was deposited in the library of Leyden, and communicated to him by Daniel Heinsius, together with two manuscripts of Martianus Capella.

With the assistance of the several manuscripts above-mentioned, and a correspondence with the most learned men of his time, namely, Selden, Langbaine, Salmasius, Leo Allatius, and many others, Meibomius completed his edition of the ancient musical authors, and published it at Amsterdam in the year 1652, with a dedication to Christina, queen of Sweden.

With respect to the other Greek writers, namely, Ptolemy, Manuel Bryennius, and Porphyry, the former of these was published, together with Porphyry's Commentary, by Antonius Gogavinus, at Venice, with a Latin version in 1562, but, as it should seem from Dr. Wallis's censure of it, in a very inaccurate manner: Meibomius somewhere says that he had intended to publish both Porphyry and Manuel Bryennius, but he not having done it, Dr. Wallis undertook it, and has given it to the world in the third volume of his works. Most of the manuscripts that were made use of for the above publications, had been carried to Constantinople upon the erection of the eastern empire, to preserve them from the ravages of the northern invaders: and as that city continued to be the seat of learning for some centuries, they, together with an immense collection of Greek and Latin manuscripts, containing the works of the most valuable of the Greek and Roman writers, were preserved there with great care. But the taking and sacking of Constantinople by the Turks, in the year 1453, was followed by an emigration of learning and learned men, who, escaping from the destruction that threatened them, settled chiefly in Italy, and became the revivers of literature in the western parts of Europe.

* Mutianus also translated the Homilies of St. Chrysostom. Fabr. Biblioth. Græc. lib. III. cap. x.

These men upon their removal from Constantinople brought with them into Italy an immense treasure of learning, consisting of ancient manuscripts in all the several branches thereof, which they disseminated by lectures in the public schools: many of these manuscripts have at different periods been printed and dispersed throughout Europe, and others of them remain unpublished, either in public libraries, or in the collections of princes and other great persons.*

These men are also said to have introduced into Italy the knowledge of ancient music, which they could no otherwise do than by public lectures, and by giving to the world copies of the several treatises of the Greek harmonicians, hereinbefore particularly mentioned; and the effects of these their labours to cultivate that kind of knowledge were made apparent by Gaffurius, or Franchinus, as he is otherwise called, who, before the end of the fifteenth century, published those several works of his, which have justly entitled him to the appellation of the Father of Music among the moderns.

Before the migration of learning from the East, all that was known of the ancient music in the western parts of Europe was contained in the writings of Censorinus, Macrobius, Martianus Capella, Boetius, Cassiodorus, and a few other Latin writers, who, as Meibomius says of Capella, might very justly be termed Pedarians, inasmuch as they were strict followers of the ancient harmonicians; or else in the works of a very learned and excellent man, to whom this censure cannot be extended, namely, Boetius, of whom, and of whose inestimable work *De Musica* a very particular account will shortly be given; in the interim it will be necessary to mention some innovations that had been made in music subsequent to Ptolemy, and before Boetius, of whom we are about to speak; and first it is to be noted that in this interval, if not before the commencement of it, the genera, at least in practice, were reduced to one, namely, the diatonic: and next it is to be remarked, that the method of notation used by the ancients, the explanation whereof is almost the sole purpose of Alypius's book, was totally changed by the Romans, who to the great system, which consisted, as has been shewn, of a bisdiapason, containing fifteen sounds, applied as many letters of their own alphabet; so that assigning to *Proslambanomenos* the letter A, the system terminated at P. It does not appear that at this time, nor indeed till a long time after, any marks or characters had been invented to denote the length or duration of musical sounds; nor, notwithstanding

all that has been said about the rhythmus of the ancients, does it in the least appear that they had any rule for determining the length of the sounds, other than that which constituted the measure of the verses† to which those sounds were severally applied; which consideration leaves it in some sort a question whether among the ancients there was any such thing as merely instrumental music.

In this method of notation by the first fifteen letters of the Latin alphabet, a modern will discover a great defect; for, being in a linear position, they by their situation inferred no diversity between grave and acute, whereas in the stave of the moderns the characters by a judicious analogy are made to express, according to their different situations in the stave, all the differences of the acute and grave from one extremity of the system to the other.

ANITIUS MANLIUS TORQUATUS SEVERINUS BOETIUS,† was the most considerable of all the Latin writers on music; indeed his treatise on the subject supplied for some centuries the want of those Greek manuscripts which were supposed to have been lost; for this reason, as also on account of his superior eminence in literature, he merits to be very particularly spoken of. He was by birth a Roman, descended of an ancient family, many of whom had been senators, and some advanced to the dignity of the consulate: the time of his birth is related to have been about that period in the Roman history when Augustulus, whose fears had induced him to a resignation of the empire, was banished, and Odoacer, king of the Herulians, began to reign in Italy, viz., in the year of Christ 476, or somewhat after. The father of Boetius dying while he was yet an infant, his relations undertook the care of his education and the direction of his studies; his excellent parts were soon discovered, and, as well to enrich his mind with the study of philosophy, as to perfect himself in the Greek language, he was sent to Athens. Returning young to Rome, he was soon distinguished for his learning and virtue, and promoted to the principal dignities in the state, and at length to the consulate. Living in great affluence and splendour, he addicted himself to the study of theology, mathematics, ethics, and logic; and how great a master he became in each of these branches of learning appears from those works of his now extant. The great offices which he bore in the state, and his consummate wisdom and inflexible integrity, procured him such a share in the public councils, as proved in the end his destruction; for as

* The manuscripts relating to music which Kircher procured access to for the purpose of compiling his *Musurgia*, are by him said to be extant in the library of the Roman College; and he speaks of one huge tome in particular, in which he says are the several works of Aristides Quintilianus, Bryennius, Plutarch, Aristotle, Callimachus, Aristoxenus, Alypius, Ptolemy, Euclid, Nicomachus, Boetius, Martianus Capella, Valla, and some others. In the account of the late discoveries in the ruins of Herculaneum, given by the Abbé Winckelman, mention is made of an ancient Greek treatise on music found there, written by one Philodemus, an author who has escaped the researches of the industrious Fabricius. Nevertheless, a philosopher of that name occurs among the Locrians, in Stanley's list of the Pythagorean School. *Hist. of Philosophy*, Pythagoras, chap. xxiv. This manuscript the antiquaries employed by the King of Naples, though it is burned to a crust, have begun to unroll; but the condition of it, and the nature of the process made use of for developing it, render it almost impossible that the world can ever be the better for its contents. See the Letter of the Abbé Winckelman to Count Bruhl on this subject.

† In the Chronology of Sir Isaac Newton, pag. 14, is the following passage:—'In the year 1035 [before Christ] the Idæi Dactyli [a people supposed to have come from Numidia, vide Heyl. Cosm. pag. 555. edit. 1705] find out iron in mount Ida in Crete, and work it into armour and iron tools, and thereby give a beginning to the trades of smiths and armourers in Europe; and by singing and dancing in their armour, and keeping time by striking upon one another's armours with their swords, they bring in music and poetry, and at the same time they nurse up the Cretan Jupiter in a cave of the same mountain, dancing about him in their armour.'

The origin of metrical numbers, and of the rhythmus, as it is called, is by some referred to this event; but admitting this as a fact, it does not ascertain the time when the characters declaring the length or duration of sounds were first invented; and the truth is that these are, comparatively speaking, a modern improvement in music.

* The name of this eminent person is sometimes written *Boethius*. Hoffmann, in his *lection*, determines in favour of *Boetius*, and it is to be noted, that in the edition of the works of Boetius, printed at Venice in 1499, the same reading is uniformly adhered to.

he ever employed his interest in the king for the protection and encouragement of deserving men, so he exerted his utmost efforts in the detection of fraud, the repressing of violence, and the defence of the state against invaders. At this time Theodoric the Goth had attempted to ravage the Campania; and it was owing to the vigilance and resolution of Boetius that that country was preserved from destruction. At length, having murdered Odoacer, Theodoric became king of Italy, where he governed thirty-three years with prudence and moderation, during which time Boetius possessed a large share of his esteem and confidence. It happened about this time that Justin, the emperor of the East, upon his succeeding to Anastasius, made an edict condemning all the Arians, except the Goths, to perpetual banishment from the eastern empire; in this edict Hormisdas, bishop of Rome, and also the senate concurred; but Theodoric, who, as being a Goth, was an Arian, was extremely troubled at it, and conceived an aversion against the senate for the share they had borne in this proscription. Of this disposition in the king, three men of profligate lives and desperate fortunes, Gaudentius, Opilio, and Basilus, took advantage; for having entertained a secret desire of revenge against Boetius, for having been instrumental in the dismissal of the latter from a lucrative employment under the king, they accused him of several crimes, such as the stifling a charge, the end whereof was to involve the whole senate in the guilt of treason; and an attempt, by dethroning the king, to restore the liberty of Italy; and, lastly, they suggested that, to acquire the honours he was in possession of, Boetius had had recourse to magical arts.

Boetius was at this time at a great distance from Rome; however Theodoric transmitted the complaint to the senate, enforcing it with a suggestion that the safety, as well of the people as the prince, was rendered very precarious by this supposed design to exterminate the Goths: the senate perhaps fearing the resentment of the king, and having nothing to hope from the success of an enterprize, which, supposing it ever to have been meditated, was now rendered abortive, without summoning him to his defence, condemned Boetius to death. The king however, apprehending some bad consequence from the execution of a sentence so flagrantly unjust, mitigated it to banishment. The place of his exile was Ticinum, now the city of Pavia, in Italy: being in that place separated from his relations, who had not been permitted to follow him into his retirement, he endeavoured to derive from philosophy those comforts which that alone was capable of affording to one in his forlorn situation, sequestered from his friends, in the power of his enemies, and at the mercy of a capricious tyrant; and accordingly he there composed that valuable discourse, entitled *De Consolatione Philosophiæ*. To give a more particular account of this book would be needless, it being well known in the learned world: one remarkable circumstance relating to it is, that, by those under affliction it has in various times been applied to, as the means of fortifying their minds and re-

conciling them to the dispensations of Providence, almost as constantly as the scriptures themselves. Our Saxon king Alfred, whose reign, though happy upon the whole, was attended with great vicissitudes of fortune, had recourse to this book of Boetius, at a time when his distresses compelled him to seek retirement; and, that he might the better impress upon his mind the noble sentiments inculcated in it, he made a complete translation of it into the Saxon language, which, within these few years, has been given to the world in its proper character: Chaucer made a translation of it into English, which is printed among his works, and is alluded to in these verses of his:—

Adam Scrivener, yf ever it the befall
Boece or Troiles for to write new,
Under thy longe lockes thou muft have the scalle:
But after my makynge thou write more true;
So ofte a daye I mote thy werke renewe,
It to correcte, and eke to rubbe and scrape,
And al is thorow thy negligence and rape.

And Camden relates, that queen Elizabeth, during the time of her confinement by her sister Mary, to mitigate her grief, read and afterwards translated it into very elegant English.

It is more than probable that Boetius would have ended his exile by a natural death, had it not been for an event that happened about two years after the pronouncing his sentence; for, in the year 524, Justin, the emperor, thought fit to promulgate an edict against the Arians, whereby he commanded, without excepting the Goths, as he had done lately, on another occasion, that all bishops who maintained that heresy should be deposed, and their churches consecrated after the true Christian form. To avert this decree, Theodoric sent an embassy to the emperor, which, to render it the more splendid and respectable, consisted of the bishop or pope himself, who at that time was John the Second, the immediate successor of Hormisdas, and four others, of the consular and patrician orders, who were instructed to solicit with the emperor the repeal of this decree, with threats, in case of a refusal, that the king would destroy Italy with fire and sword. Upon the arrival of the ambassadors at Constantinople, the emperor very artfully contrived to receive them in such a manner as naturally tended to detach them from their master, and make them slight the business they were sent to negotiate, and he succeeded accordingly; for as soon as they approached the city, the emperor, the clergy, and a great number of the people, went in procession to meet them. In their way to the church, the upper hand of the emperor was given to the bishop; and upon their arrival there, the holy father, to shew his gratitude for the honour done him of sitting on the right of the imperial throne, celebrated the day of the Resurrection after the Roman use, and crowned Justin emperor. Of the insufferable pride and arrogance of this John so many instances are related, that no one who reads them can lament the fate which afterwards befel him, viz., that he died in a dungeon. It is recorded, that upon his arrival at Corinth, in his way to Constantinople, great enquiry was made for a gentle horse for him to

ride on; upon which, a nobleman of that city sent him one that, for the goodness of its temper, had been reserved for the use of his lady; the bishop accepted the favour, and, after travelling as far as he thought fit, returned the beast to the owner: but behold what followed, the sagacious animal, conscious of the merit of having once borne the successor of St. Peter, refused ever after to let the lady mount him; upon which the husband sent him again to the Pope, with a request that he would accept of that which was no longer of any use to the owner. This event, it is to be noted, is recorded as a miracle; but if we allow it the credit due to one, it will reflect but little honour on the worker of it, since the utmost it proves is, that the Pope had the power of communicating to a horse a quality which had rendered the primitive possessor of it to the last degree odious.

It is not easy to see how, with any degree of propriety, or consistent with justice, the misbehaviour of the ambassadors could be imputed to Boetius, who, all this while, was confined to the place of his exile, and seemed to be employing his time in a way much more suited to his circumstances and character than in the abetting the misguided and malevolent zeal of either of two enthusiastic princes; nevertheless, we are told, that Theodoric no sooner heard of the behaviour of John and his colleagues, than he began to meditate the death of Boetius: he however suppressed his resentment, till he had received a formal complaint from his people of the infidelity of those trusted by him. Immediately on his arrival, he committed the bishop to close confinement, wherein he shortly after ended his days. Had his revenge stopped here, his conduct might have escaped censure, but he completed the ruin of his character by sentencing Boetius to death, who, together with Symmachus, the father of his wife, was beheaded in prison on the tenth of the kalends of November, 526. In order to palliate the cruelty of the king, it has been insinuated, that the treachery of his ambassadors was a kind of evidence that the conspiracy had a foundation in truth; and that fact once established, the intimacy which had subsisted for several years between Boetius and the bishop, before the banishment of the former, furnished a ground for suspicion that he was at least not ignorant of it. It is farther said, that, as if he believed the conspiracy to be real, the king sent to Boetius, in prison, offers of pardon, if he would disclose the whole treason; but the protestations which he made upon that occasion of his innocence, afford the strongest evidence that could be given that he was not privy to it.

But the causes of this severe resolution of Theodoric are elsewhere to be sought for: he was arrived at the age of seventy-two, and for some years had been infected with the vices usually imputed to old age: he had reigned more than thirty-three years; and though the mildness and prudence of his government, and that paternal tenderness with which he had ruled his people, were greater than could be expected from a prince who had made his way to dominion by the murder of the rightful sovereign, the dis-

appointments he had met with, the insults that had been offered him, one particularly in the person of his sister, who had received some indignities from the African Vandals, the contempt that had been shewn him in this late embassy, and, above all, his utter inability to resent these injuries in the way he most desired, these misfortunes concurring, deprived him of that equanimity of temper which had been the characteristic of his reign: in short, he grew jealous, timid, vindictive, and cruel; and after this, nothing he did was to be wondered at.* But to return to Boetius.

The extensive learning and eloquence of this great man are conspicuous in his works; and his singular merits have been celebrated by the ablest writers that have lived since the restoration of learning. His first wife, for he was twice married, was named Helpes, a Sicilian lady of great beauty and fortune, but more eminently distinguished by the endowments of her mind, and her inviolable affection for so excellent a man. She had a genius for poetry, and wrote with a degree of judgment and correctness not common to her sex. He desired much to have issue by her; but she dying young, he embalmed her memory in the following elegant verses:—

Helpes dicta fui, Siculæ regionis alumna,
Quam procul à patria, conjugis egit amor.
Quo sine, mœsta dies, nox anxia, flebilis hora
Nec solum caro, sed spiritus unus erat.
Lux mea non clausa est, tali remanente marito,
Majorique animæ, parte superstes ero.
Porticibus sacris tam nunc peregrina quiesco,
Judicis eterni testificata thronum.
Ne qua manus bustum violet, nisi fortè jugalis,
Hæc iterum cupiat jungere membra suis.
Ut Thalami cumuliq; comes, nec morte revellar.
Et socios vitæ necat uterque cinis.

His other wife, Rusticana, was the daughter of Quintus Aurelius Menius Symmachus, a chief of the senate, and consul in the year 485: with her he received a considerable accession to his fortune. He had several children by her; two of whom arrived to the dignity of the consulate. His conjugal tenderness was very exemplary; and it may be truly said, that, for his public and private virtues, he was one of the great ornaments of that degenerate age in which it was his misfortune to be born.

The tomb of Boetius is to be seen in the church of St. Augustine, at Pavia, near the steps of the chancel, with the following epitaph:—

Mœonia et Latia lingua clarissimus, et qui
Consul eram, hic perii, missus in exilium;
Et quia mors rapuit? Probitas me vexit ad auras,
Et nunc fama viget maxima vivit opus.

Many ages after his death the emperor Otho the Third enclosed his bones, then lying neglected

* Procopius relates that he was frightened to death; the following is his account of that strange accident:—

‘Symmachus and his son-in-law, Boetius, just men and great relievers of the poor, senators and consuls, had many enemies, by whose false accusations Theodoric, being persuaded that they plotted against him, put them to death, and confiscated their estates. Not long after, his waiters set before him at supper the head of a great fish, which seemed to him to be the head of Symmachus, lately murdered; and with his teeth sticking out, and fierce glaring eyes, to threaten him. Being frightened, he grew chill, went to bed lamenting what he had done to Symmachus and Boetius, and soon after died.’ De Bello Gothico, lib. I.

amongst the rubbish, in a marble chest; upon which occasion Gerbert, an eminent scholar of that time, and who was afterwards advanced to the papal chair by the name of Sylvester the Second, did honour to his memory in the following lines:—

Roma potens, dum jura suo declarat in orbe,
Tu pater, et patriæ lumen, Severine Boeti,
Consulis officio, rerum disponis habenas,
Infundis lumen studiis, et cedere nescis
Græcorum ingenius, sed mens divina coercet
Imperium mundi. Gladio bacchante Gothorum
Libertas Romana perit: tu consul et exul,
Insignes titulos præclara morte relinquis,
Tunc decus Imperii, summas qui prægravat artes,
Tertius Otho sua dignum te judicat aula;
Æternumque tui statuit monumenta laboris,
Et bene promeritum, meritis exornat honestis.

The writings of Boetius, the titles whereof are given below,* seem to have been collected with great care: an edition of them was printed at Venice, in one volume in folio, 1499. In 1670, Glareanus, of Basil, collated that with several manuscripts, and published it, with a few various readings in the margin. To render his author more intelligible, the editor has inserted sundry diagrams of his own; but has been careful not to confound them with the original ones of Boetius.

But before these, or indeed the doctrines of Boetius, can be rendered intelligible, it is necessary first to state the general drift and tendency of the author, in his treatise *De Musica*; and next to explain the several terms made use of by him in the demonstration of the proportions of the consonances and other intervals, as also the proportions themselves, distinguishing between the several species of arithmetical, geometrical, and harmonical proportion.

The design of Boetius in the above-mentioned treatise was, by the aid of arithmetic, to demonstrate those ratios which those of the Pythagorean school had asserted subsisted between the consonances. These ratios are either of equality, as 1 : 1, 2 : 2, 8 : 8, or of inequality, as 4 : 2, because the first contains the latter once, with a remainder: and of these ratios, or proportions of inequality, there are five kinds, as, namely, multiplex, superparticular, superpartient, multiplex superparticular, and multiplex superpartient; all which will hereafter be explained.

These terms are made use of by Euclid, and others of the Greek writers, and were adopted by Boetius, and through him have been continued down to the Italian writers, in whose works they are perpetually occurring; and though the modern arithmeticians have rejected them, and substituted in their places, as a much shorter and more intelligible method of designation, the numbers that constitute the several proportions, it is necessary to the understanding of the ancient writers, that the terms used by them should also be understood.

Another thing necessary to be known, in order to the understanding not only of Boetius and his followers, but all who have written on those abstruse parts of music the ancient modes, the ecclesiastical tones, and their divisions into authentic and plagal, is the nature of the three different kinds of proportion, namely, arithmetical, geometrical, and harmonical; an explanation whereof, as also of the several kinds of proportion of inequality can hardly be given in terms more accurate, precise, and intelligible, than those of Dr. Holder, in his treatise on the Natural Grounds and Principles of Harmony, chap. v. wherein, after premising that all harmonic bodies and sounds fall under numerical calculations, he speaks thus of proportion in general:—

‘We may compare (*i. e.* amongst themselves) either (1) magnitudes (so they be of the same kind); or (2) the gravitations, velocities, durations, sounds, &c. from thence arising; or, farther, the numbers themselves, by which the things compared are explicated; and if these shall be unequal, we may then consider either, first, how much one of them exceeds the other; or, secondly, after what manner one of them stands related to the other. as to the quotient of the antecedent (or former term) divided by the consequent (or latter term) which quotient doth expound, denominate, or shew, how many times, or how much of a time or times, one of them doth contain the other: and this by the Greeks is called *λογος*, ratio, as they are wont to call the similitude or equality of ratios *αναλογία* analogie, proportion, or proportionality; but custom, and the sense assisting, will render any over-curious application of these terms unnecessary.

From these two considerations last mentioned, the same author says, there are wont to be deduced three sorts of proportion, arithmetical, geometrical, and a mixed proportion, resulting from these two, called harmonical. These are thus explained by him:—

‘1. Arithmetical, when three or more numbers in progression have the same difference; as 2, 4, 6, 8, &c. or discontinued, as 2, 4, 6; 14, 16, 18.’

‘2. Geometrical, when three or more numbers have the same ratio, as 2, 4, 8, 16, 32; or discontinued, as 2, 4; 64, 128.’

‘Lastly, Harmonical, (partaking of both the other) when three numbers are so ordered, that there be the same ratio of the greatest to the least, as there is of the difference of the two greater to the difference of the two less numbers, as in these three terms, 3, 4, 6, the ratio of 6 to 3, (being the greatest and least terms) is duple; so is 2, the

* In Porphyrium à Victorino translatus, lib. II. In Porphyrium à se Latinum factum, lib. V. In Prædicamenta Aristotelis, lib. IV. In librum de Interpretatione Commentaria minora, lib. II. In eundem de Interpretatione Commentaria majora, lib. VI. Analyticorum priorum Aristotelis, Anitio Manlio Severino Boethio interprete, lib. II. Analyticorum posteriorum Aristotelis, Anitio Manlio Severino Boethio interprete, lib. II. Introductio ad categoricos Syllogismos, lib. I. De Syllogismo categorico, lib. II. De Syllogismo hypothetico, lib. I. De Divisione, lib. I. De Definitione, lib. I. Topiceorum Aristotelis, Anitio Manlio Severino, interprete, lib. VIII. Elenchorum Sophisticorum Aristotelis, Anitio Manlio Severino Boethio interprete, lib. II. In Topica Ciceronis, lib. VI. De Differentiis Topicis, lib. IV. De Consolatione Philosophiæ, inculcatis Johannis Murnelli (partim etiam Rodolphi Agricolæ) Commentariis illustrati, lib. V. De Sancta Trinitate, cum Gilberti episcopi Pictaviensis, ex vetustissimo porretæ doctissimi olim viri commentariis, jam primum ex recentissimo scripto codice in lucem editis, lib. IV. Quorum primus continet excellentem & piam doctrinam, de Trinitate & Unitate Dei: quomodo Trinitas sit Unus Deus, & non Tres Dii, lib. I. Secundus tractat Questionem An Pater, & Filius, & Spiritus Sanctus substantialiter prædicentur, lib. I. Tertius complectitur Hebdomaden: An omne quod sit, bonum sit, lib. I. Quartus evidenter & piè docet, in Christo duos esse Naturas, & unam Personam, adversus Eutychem & Nestorium, lib. I. De Unitate & Uno, lib. I. De Disciplina Scholarium, lib. I. De Arithmetica, lib. II. De Musica, lib. V. De Geometria, lib. II.

'difference of 6 and 4 (the two greater numbers) to 1, the difference of 4 and 3 (the two less numbers) duple also. This is proportion harmonical, which diapason, 6 to 3, bears to diapente, 6 to 4, and diatessaron, 4 to 3, as its mean proportionals.'

'Now for the kinds of ratios most properly so called; *i. e.* geometrical: first observe, that in all ratios, the former term or number, (whether greater or less) is always called the antecedent; and the other following number, is called the consequent. If therefore, the antecedent be the greater term, then the ratio is either multiplex, superparticular, superpartient, or (what is compounded of these) multiplex superparticular, or multiplex superpartient.'

'1. Multiplex; as duple, 4 to 2; triple, 6 to 2; quadruple, 8 to 2.'

'2. Superparticular; as 3 to 2, 4 to 3, 5 to 4; exceeding but by one aliquot part, and in their radical, or least numbers, always but by one; and these ratios are termed sesquialtera, sesquitercia, (or supertertia) sesquiquarta, or (superquarta) &c. Note, that numbers exceeding more than by one, and but by one aliquot part, may yet be superparticular, if they be not expressed in their radical, *i. e.* least numbers, as 12 to 8, hath the same ratio as 3 to 2; *i. e.* superparticular; though it seem not so till it be reduced by the greatest common divisor to its radical numbers, 3 to 2. And the common divisor, (*i. e.* the number by which both the terms may severally be divided) is often the difference between the two numbers; as in 12 to 8, the difference is 4, which is the common divisor. Divide 12 by 4, the quotient is 3; divide 8 by 4, the quotient is 2; so the radical is 3 to 2. Thus also, 15 to 10, divided by the difference, 5, gives 3 to 2; yet in 16 to 10, 2 is the common divisor, and gives 8 to 5, being superpartient. But in all superparticular ratios, whose terms are thus made larger by being multiplied, the difference between the terms is always the greatest common divisor; as in the foregoing examples.'

'The third kind of ratio is superpartient, exceeding by more than one, as 5 to 3; which is called superbipartiens tertias, (or tria) containing 3 and $\frac{2}{3}$ 8 to 5, supertripartiens quintas, 5 and $\frac{3}{5}$.

'The fourth is multiplex superparticular, as 9 to 4, which is duple, and sesquiquarta; 13 to 4, which is triple and sesquiquarta.'

'The fifth and last is multiplex superpartient, as 11 to 4; duple, and supertripartiens quartas.*

'When the antecedent is less than the consequent, viz., when a less is compared to a greater; then the same terms serve to express the ratios, only prefixing sub to them; as, submultiplex, subsuperparticular, (or subparticular) subsuperpartient, (or subpartient) &c. 4 to 2 is duple; 2 to 4 is subduple, 4 to 3 is sesquitercia; 3 to 4 is subsesquitercia, 5 to

'3 is superbipartiens tertias; 3 to 5 is subsuperbipartiens tertias, &c.'

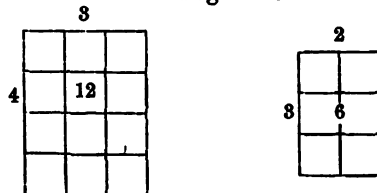
The same author proceeds to find how the habitudes of ratios are found in these words:—

'All the habitudes of ratios to each other, are found by multiplication or division of their terms, by which any ratio is added to or subtracted from another; and there may be use of progression of ratios or proportions, and of finding a medium, or mediety, between the terms of any ratio; but the main work is done by addition and subtraction of ratios, which, though they are not performed like addition and subtraction of simple numbers in arithmetic, but upon algebraic grounds, yet the praxis is most easy.'

'One ratio is added to another ratio, by multiplying the two antecedent terms together, *i. e.* the antecedent of one of the ratios, by the antecedent of the other. (For the more ease, they should be reduced into their least numbers or terms); and then the two consequent terms, in like manner. The ratio of the product of the antecedents to that of the product of the consequents, is equal to the other two, added or joined together. Thus, for example, add the ratio of 8 to 6; *i. e.* (in radical numbers) 4 to 3, to the ratio of 12 to 10

'*i. e.* 6 to 5; the product will be 24 and 4— | —3
'15, *i. e.* 8 to 5; you may set them thus, — | —5
'and multiply 4 by 6, they make 24; 6— | —5
'which set at the bottom; then multiply — | —
'3 by 5, they make 15; which likewise 24 15
'set under, and you have 24 to 15: which is a ratio compounded of the other two, and equal to them both. Reduce these products, 24 and 15, to their least radical numbers, which is by dividing as far as you can find a common divisor to them both (which is here done by 3), and that brings them to the ratio of 8 to 5. By this you see that a third minor, 6 to 5, added to a fourth, 4 to 3, makes a sixth minor, 8 to 5. If more ratios are to be added, set them all under each other, and multiply the first antecedent by the second, and that product by the third; and again that product by the fourth, and so on; and in like manner the consequents.'

'This operation depends upon the fifth proposition of the eighth book of Euclid; where he shows that the ratio of plain numbers is compounded of their sides. See these diagrams:—'



'Now compound these sides. Take for the antecedents, 4, the greater side of the greater plane, and 3, the greater side of the less plane, and they multiplied give 12. Then take the remaining two numbers, 3 and 2, being the less sides of the planes (for consequents), and they give 6. So the sides of 4 and 3, and of 3 and 2, compounded (by multiplying

* The above terms were used by the ancient geometers and arithmeticians; and therefore, for the understanding of such, and of Boetius in particular, it is very necessary that their meaning should be ascertained: but the manner now is to express the proportions by the numbers themselves, rather than by the terms; and briefly to say, as 31 is to 7, or as 7 is to 31, rather than to say, quadrupla superbipartiens septimas, or subquadrupla supertri partiens septimas. Vide Harris's Lex. Tech. vol. I. PROPORTION.

'the antecedent terms by themselves and the consequents by themselves) make 12 to 6; *i. e.* 2 to 1, which being applied, amounts to this; ratio sesquialtera 3 to 2, added to ration sesquitercia, 4 to 3, makes duple ration, 2 to 1. Therefore, diapente added to diatessaron, makes diapason.'

'Subtraction of one ration from another greater, is performed in like manner, by multiplying the terms; but this is done not laterally, as in addition, but crosswise; by multiplying the antecedent of the former (*i. e.* of the greater) by the consequent of the latter, which produceth a new antecedent; and the consequent of the former by the antecedent of the latter, which gives a new consequent; and therefore, it is usually done by an oblique decussation of the lines. For example, if

4 3 you would take 6 to 5 out of 4 to 3, you may set them down thus: Then 4, multiplied by 5, makes 20; and 3, by 6, gives 18; so 20 to 18, *i. e.* 10 to 9, is the remainder. That is, subtract a third minor out of a fourth, and there will remain a tone minor.

'Multiplication of ratios is the same with their addition; only it is not wont to be of divers ratios, but of the same, being taken twice, thrice, or oftener, as you please. And as before, in addition, you added divers ratios, by multiplying them; so here, in multiplication, you add the same ratio to itself, after the same manner, *viz.*, by multiplying the terms of the same ratio by themselves; *i. e.* the antecedent by itself, and the consequent by itself, (which in other words, is to multiply the same by 2) and will in the operation be to square the ration first propounded (or give the second ordinal power; the ration first given being the first power or side) and to this product, if the simple ration shall again be added, (after the same manner as before) the aggregate will be the triple of the ration first given; or the product of that ration, multiplied by 3, *viz.*, the cube, or third ordinal power. Its biquadrate, or fourth power, proceeds from multiplying it by 4; and so successively in order, as far as you please you may advance the powers. For instance, the duple ration, 2 to 1, being added to itself, dupled or multiplied by 2, produceth 4 to 1, (the ration quadruple); and if to this, the first again be added, (which is equivalent to multiplying that said first by 3), there will arise the ration octuple, or 8 to 1. Whence the ration, 2 to 1, being taken for a root, its duple 4 to 1, will be the square; its triple, 8 to 1, the cube thereof, &c. as hath been said above. And to use another instance; to duple the ration of 3 to 2, it must be thus squared:—3 by 3 gives 9; 2 by 2 gives 4, so the duple or square of 3 to 2 is 9 to 4. Again, 9 by 3 is 27, and 4 by 2 is 8; so the cubic ration of 3 to 2 is 27 to 8. Again, to find the fourth power or biquadrate, (*i. e.* squared square,) 27 by 3 is 81, 8 by 2 is sixteen; so 81 to 16 is the ration of 3 to 2 quadrupled; as it is dupled by the square, tripled by the cube, &c. To apply this instance to our present purpose, 3 to 2 is the ration of diapente, or a fifth in harmony; 9 to 4 is the

'ratio of twice diapente, (or a ninth, *viz.*, diapason, with tone major;) 27 to 8 is the ration of thrice diapente, or three fifths, which is diapason, with sixth major, *viz.*, 13 major; the ration of 81 to 16 makes four fifths, *i. e.* disdiapason, with two tones major, *i. e.* a seventeenth major, and a comma of 81 to 80.'

'To divide any ration, the contrary way must be taken; and by extracting of these roots respectively, division by their indices will be performed, *Et gr.* to divide it by 2, is to take the square root of it; by 3, the cube root; by 4 the biquadratic, &c. Thus, to divide 9 to 4 by 2, the square root of 9 is 3, the square root of 4 is 2; then 3 to 2 is a ration just half so much as 9 to 4.'

CHAP. XXV.

THE nature of proportion being thus explained, without a competent knowledge whereof it would be in vain to attempt the reading of Boetius, it remains to give such an account of his treatise *De Musica* as is consistent with a general history of the science, and may be sufficient to invite the studious inquirer to an attentive perusal of this most valuable work. Here therefore follow, in regular order, the titles of the several chapters contained in the five books of Boetius's treatise *De Musica*, with an abridgment of such of them as seem most worthy of remark.

Chap. i. *Musica naturaliter nobis esse conjunctam, et mores vel honestare vel evertere.*

Boetius in this chapter observes, that the sensitive power of perception is natural to all living creatures, but that knowledge is attained by contemplation. All mortals, he says, are endued with sight, but whether the perception be effected by the coming of the object to the sight, or by rays sent forth to it, is a doubt. When any one, continues he, beholds a triangle or a square, he readily acknowledges what he discovers by his eyes, but he must be a mathematician to investigate the nature of a triangle or a square. Having established this proposition, he applies it to the other liberal arts, and to music in particular; which he undertakes to shew is connected with morality, inasmuch as it disposes the mind to good or evil actions; to this purpose he expresses himself in these terms: 'The power or faculty of hearing enables us not only to form a judgment of sounds, and to discover their differences, but to receive delight, if they are sweet and adapted to each other; whence it comes to pass that, as there are four mathematical sciences,* the rest

* The four mathematical arts are arithmetic, geometry, music, and astronomy; these were anciently termed the quadrivium, or fourfold way to knowledge; the other three, grammar, rhetoric, and logic, completing the number of the seven liberal sciences, were termed the trivium or threefold way to eloquence. Vide Du Cange, voce *QUADRIVIVM*.

This scholastic division is recognised in an ancient monumental inscription in Westminster Abbey, in memory of Gilbert Crispin, who died abbot of Westminster in 1117.

*Mitis eras justus prudens fortis moderatus
Doctus quadrivio nec minus in trivio.*

Widmore's Hist. of Westminster Abbey.

And these are the arts understood in the academical degrees of bachelor and master of arts, for the ancient course of scholastic institution required a proficiency in each. The satire, as it is called, of Martianus Capella, *De Nuptiis Philologiae et Mercurii*, is a treatise on the seven

labour at the investigation of truth; but this, besides that it requires speculation, is connected with morality; for there is nothing that more peculiarly distinguishes human nature, than that disposition observable in mankind to be one way affected by sweet, and another by contrary sounds; and this affection is not peculiar to particular tempers or certain ages, but is common to all; and infants, young, and even old men, are by a natural instinct rendered susceptible of pleasure or disgust from consonant or discordant sounds. From hence we may discern that it was not without reason that Plato said, that the soul of the world was conjoined with musical proportion: and such is the effect of music on the human manners, that a lascivious mind is delighted with lascivious modes, and a sober mind is more disposed to sobriety by those of a contrary kind: and hence it is that the musical modes, for instance the Lydian and Phrygian, take their names from the tempers or distinguishing characteristics of those nations that respectively delight in them: for it cannot be that things, in their nature soft, should agree with such as are harsh, or contrary-wise; for it is similitude that conciliates love; wherefore Plato held that the greatest caution was to be taken not to suffer any change in a well-moraled music, there being no corruption of manners in a republic so great as that which follows a gradual declination from a prudent and modest music; for, whatever corruptions are made in music, the minds of the hearers will immediately suffer the same, it being certain that there is no way to the affections more open than that of hearing: and these effects of music are discernible among different nations, for the more fierce, as the Getæ, are delighted with the harder modes, and the more gentle and civilized with such as are moderate; although in these days few of the latter are to be found.

Boetius then proceeds to relate that the Lacedæmonians, sensible of the great advantages resulting to a state from a sober, modest, and well-regulated music, invited, by a great reward, Taletas the Cretan to settle among them, and instruct their youth in music. And he relates that the Spartans were so jealous of innovations in their music, that, for adding only a single chord to those he found, they banished Timotheus from Sparta by a decree; which, however he could come by so great a curiosity, he gives in the original Greek, and is as follows:—ΕΠΕΙ ΔΕ ΤΙΜΟΘΕΟΣ Ο ΜΙΑΞΙΟΣ ΠΑΡΑΓΙΜΕΝΟΣ ΕΝ ΤΑΝ ΑΜΕΤΕΡΑΝ ΠΟΙΩΝ, ΤΑΝ ΠΑΛΑΙΑΝ ΜΟΔΙΗΝ ΑΤΙΜΑΖΑΣ. ΚΑΙ ΤΑΝ ΔΙΑ ΠΑΝ ΕΠΤΑ ΧΟΡΔΑΝ ΚΙΘΑΡΙΖΕΙ, ΑΠΟΣΤΡΕΦΟΜΕΝΟΣ ΠΟΛΥΦΩΝΙΑΝ ΕΙΣΑΓΩΝ, ΑΥΜΑΙΝΕΤΑΙ ΤΑΣ ΑΚΟΑΣ ΤΩΝ ΝΕΩΝ ΔΙΑ ΤΕ ΤΑΣ ΠΟΛΥΧΟΡΔΑΣ, ΚΑΙ ΤΑΣ ΚΑΙΝΟΤΑΤΑΣ ΤΟΥΤΩΝ ΜΕΛΕΟΣ ΑΓΕΝΝΕ ΚΑΙ ΠΟΙΚΙΛΑΝ ΑΝΤΙΑΠΛΟΑΝ, ΚΑΙ ΤΕΤΑΓΜΕΝΑΝ ΑΜΦΙΛΑΥΙΑΝ ΜΟΔΙΗΝ ΕΠΙ ΧΡΩΜΑΤΟΣ ΣΥΝΕΙΣΤΑΜΕΝ ΤΟΥΤΟΥ ΜΕΛΕΟΣ, ΔΙΑΣΤΑΣΙΝ.

liberal sciences: Cassiodorus, who lived about half a century after him, wrote also De septem Diaplis; and others of the learned in like manner have written professedly on them all. Farther, of Joannes Basingus alio Basingstockius, who flourished in 1252, it is on the authority of Matthew Paris, who knew him, related that he was, 'Vr quidem in trivis et quadrivis experientissimus.' Tauner's Bibliotheca 451.

ΑΝΤΙ ΓΑΡ ΕΝΑΡΜΟΝΙΩ ΠΟΙΑΝ ΑΝΤΙΣΤΡΕΦΟΝ ΑΜΟΙΒΑΝ. ΠΑΡΑΚΑΛΑΘΕΙΣ ΔΕ ΕΝ ΤΟΝ ΑΥΤΩΝΑ ΤΑΣ ΕΛΕΥΣΙΝΙΑΣ ΔΑΜΑΤΡΟΣ ΑΙΧΟΣ ΔΙΕΦΗΜΙΣΑΤΟ ΤΑΝ ΤΩ ΜΥΘΩ ΚΙΛΗΝΗΙΝ: ΤΑΝ ΓΑΡ ΣΕΜΕΛΑ ΟΔΥΝΑΝ ΟΥΚ ΕΝΔΕΚΑΤΟΣ ΝΕΟΣ ΔΙΔΑΧΗΝ ΕΔΙΔΑΞΕ. ΕΙΤΑ ΠΕΡΙ ΤΟΥΤΩΝ ΤΟΝ ΒΑΣΙΔΕΑΝ ΚΑΙ ΤΟΥ ΠΗΤΟΡΟΣ ΜΕΜΨΑΤΑΙ ΤΙΜΟΘΕΟΝ, ΕΠΑΝΑΤΙΘΕΤΑΙ ΔΕ ΚΑΙ ΤΑΝ ΕΝΔΕΚΑ ΧΟΡΔΑΝ ΕΚΤΑΝΩΝ ΤΑΣ ΠΕΡΙΑΣΤΑΣ ΕΠΙΛΕΙΠΟΜΕΝΟΣ ΤΑΝ ΕΠΤΑΧΟΡΔΑΝ ΑΣΤΟΣ. ΤΟ ΓΑΡ ΠΟΛΙΟΣ ΒΑΡΟΣ ΑΠΤΩΝ ΤΕΤΑΡ ΒΗΤΑΙ ΕΣ ΤΑΝ ΣΠΑΡΤΑΝ ΕΠΙΦΕΡΕΙΝ: ΤΙΘΩΝ ΜΗ ΚΑΛΩΝ ΝΗΤΩΝ ΜΗΠΟΤΕ ΤΑΡΑΤΤΗΤΑΙ ΚΛΕΟΣ ΑΓΟΡΩΝ.*

He then proceeds to declare the power of music in these words:—'It is well known that many wonderful effects have been wrought by the power of music over the mind; oftentimes a song has repressed anger; and who is ignorant that a certain drunken young man of Taurominium being incited to violence by the sound of the Phrygian mode, was by the singing of a spondeus appeased; for when a harlot was shut up in the house of his rival, and the young man, raging with madness, would have set the house on fire, Pythagoras, who, agreeable to his nightly custom, was employed in observing the motions of the celestial bodies, as soon as he was informed that the young man had been incited to this outrage by the Phrygian mode, and found that he would not desist from his wicked attempt, though his friends repeated their admonitions to him for that purpose, ordered them to change the mode, and thereby attemperated the disposition of the raging youth to a most tranquil state of mind. Cicero relates the same story in different words, but in nearly the same manner:—"When (says he) certain drunken men stirred up, as is often the case, by the sound of the tibia, would have broke open the doors of a modest woman, Pythagoras is said to have admonished the tibia-cinist to play a spondeus, which he had no sooner done than the lustfulness of these men was appeased by the slowness of the mode and the gravity of the performer." But to gather some similar examples in few words, Terpander and Arion of Methymne, the next city in Lesbos to Mitylene for grandeur, cured the Lesbians and Ionians of most grievous diseases by the means of music; Hismenias, the Theban, by his music is reported to have freed from their torments divers Beotians, who were sorely afflicted with sciatic pains.† Empedocles also, when a certain person in a fury would have attacked his guest, for having accused and procured the condemnation of his father, is said to have diverted him by a particular mode in music, and by that means to have appeased the anger of the young man. And so well was the power of music known to the ancient philosophers, that the Pythagoreans, when they had

* Translation, see pag. 80, note.

† There are many relations in history of the efficacy of music in the cure of bodily diseases. It is reported that Thales, the Cretan, being by the advice of the Oracle called to Sparta, cured a raging pestilence by the power of music alone. The assertion of Boetius with respect to the Sclavians seems to be founded on a passage in Aulus Gellius, lib. IV. chap. xiii. who reports that persons afflicted with that disease were eased of their pains by certain gentle modulations of the tibia; and that by the same means many had been cured who had been bitten by serpents and other venomous creatures.

a mind to refresh themselves by sleep after the labours and cares of the day, made use of certain songs to procure them an easy and quiet rest; and when they awaked they also dispelled the dulness and confusion occasioned by sleep by others, knowing full well that the mind and the body were conjoined in a musical fitness, and that whatever affects the body, will also produce a similar effect on the mind; which observation it is reported Democritus, whom his fellow-citizens had confined, supposing him mad, made to Hippocrates, the physician, who had been sent for to cure him. To what purpose then are all these things? We cannot doubt but that our body and mind are in manner constituted in the same proportions by which harmonical modulations are joined and compacted, as the following argument shall shew; for hence it is that even infants are delighted with a sweet, or disgusted with a harsh song: every age and either sex are affected by music, and though they are different in their actions, yet do they agree in their love of music. Nay, such as are under the influence of sorrow, even modulate their complaints, which is chiefly the case with women, who, by the sweetness of their songs, find means to alleviate their sorrows;* and it was for this reason that the ancients had a custom for the tibia to precede in their funeral processions. Pappinus Statius testifies as much in the following verse:—

‘Cornu grave mugit adunco,
‘Tibia cui teneros suetum producere manes.

‘And though a man cannot sing sweetly, yet while he sings to himself he draws forth an innate sweetness from his heart. Is it not manifest that the sound of the trumpet fires the minds of the combatants, and impels them to battle; why then is it not probable that a person may be incited to fury and anger from a peaceful state of mind? There is no doubt but that a mode may restrain anger or other inordinate desires; for what is the reason that when a person receives into his ears any song with pleasure, that he should not also be spontaneously converted to it, or that the body should not form or fashion some motion similar to what he hears: from all these things it is clear beyond doubt that music is naturally joined to us, and that if we would we cannot deprive ourselves of it; wherefore the power of the mind is to be exerted, that what is implanted in us by nature should also be comprehended by science. For as in sight it is not sufficient for learned men barely to behold colours and forms, unless they also investigate their properties; so also is it not sufficient to be delighted with musical songs, unless we also learn by what proportion of voices or sounds they are joined together.’

Cap. ii. Tres esse musicas, in quibus de vi musicæ narratur.

The three kinds of music here meant are, mundane, humane, and instrumental; and of each of these mention has been made in a preceding page.

* Modern history furnishes a curious fact to prove the truth of this observation; for it is related of the princess of Navarre, mother of Henry IV. of France, that at the instant when she was delivered of him she sung a song in the Bearnois language. Life of Henry le Grand by the Bishop of Rodes.

Cap. iii. De vocibus ac de musicæ elementis.—Cap. iv. De speciebus inequalitatis.—Cap. v. Quæ inequalitatis species consonantiis aptentur.—Cap. vi. Cur multiplicitas, et superparticularitas consonantiis deputentur.—Cap. vii. Quæ proportionibus quibus consonantiis musicis aptentur.—Cap. viii. Quid sit sonus, quid intervallum, quid concinentia.—Cap. ix. Non omne judicium dandum esse sensibus, sed amplius rationi esse credendum, in quo de sensuum fallacia.

It is the business of this chapter to show, that though the first principles of harmony are taken from the sense of hearing, for this reason, that were it otherwise there could be no dispute about sounds; yet, in this case, the sense is not the sole arbiter. Boetius to this purpose expresses himself very rationally in the following terms:—‘Hearing is as it were but a monitor, but the last perfection and power of judging about it depends upon reason. What need is there for many words to point out the error which the senses are liable to, since we know that neither is the same power of perception given to every one alike, nor is it always equal in the same man; on the other hand, it is vain to commit the examination of truth to an uncertain judgment. The Pythagoreans for this reason took as it were a middle way; for though they did not make the hearing the sole arbiter, yet did they search after and try some things by the ears only: they measured the consonants themselves by the ears, but the distances by which these consonants differed from each other they did not trust to the ears, the judgment whereof is inaccurate, but committed them to the examination of reason, thereby making the sense subservient to reason, which acted as a judge and a master. For though the momenta of all arts, and of life itself, depend upon our senses, yet no sure judgment can be formed concerning them, no comprehension of the truth can exist, if the decision of reason be wanting; for the senses themselves are equally deceived in things that are very great or very little: and with respect of that of hearing, it with great difficulty perceives those intervals which are very small, and is deafened by those which are very great.’

Cap. x. Quemadmodum Pythagoras proportionibus consonantiarum investigaverit.—Cap. xi. Quibus modis variè à Pythagora proportionibus consonantiarum perpenas sint.

The account delivered in the two preceding chapters, and which is mentioned in almost every treatise on the subject of music extant, is evidently taken from Nicomachus, whose relation of this supposed discovery of Pythagoras is hereinbefore given at length.

Cap. xii. De divisione vocum, earumque explanatione.—Cap. xiii. Quod infinitatem vocum humana natura finierit.—Cap. xiv. Quis sit modus audiendi.—Cap. xv. De ordine theorematum, id est speculativorum.—Cap. xvi. De consonantiis proportionum, et tono et semitono.—Cap. xvii. In quibus primis numeris semitonium constet.—Cap. xviii. Diatessaron a diapente tono distare.—Cap. xix. Diapason quinque tonis, et duobus semitoniis jungi.—Cap. xx. De additione chordarum, earumque nominibus.

The substance of this chapter has already been given.

Cap. xxi. De generibus cantilenarum.—Cap. xxii. De ordine chordarum nominibusque in tribus generibus.—Cap. xxiii. Quæ sint inter voces in singulis generibus proportionales.

These three chapters give a brief and but a very superficial account of the genera.

Cap. xxiv. Quid sit synaphe.—Cap. xxv. Quid sit diezeuxia.

In these two chapters the difference between the conjunct and disjunct tetrachords is explained.

Cap. xxvi. Quibus nominibus nervos appellaverit Albinus.

Albinus is said by Cassiodorus to have been a great man, and to have written a brief discourse on music, which he himself had seen and attentively perused in one of the public libraries at Rome; and Cassiodorus seems to prophecy that some time or other it would be taken away in an incursion of the Barbarians: it has accordingly sustained that fate; for Meibomius, in his preface to Gaudentius, speaks of that manuscript as irrecoverably lost.

Cap. xxvii. Qui nervi quibus syderibus comparentur.

The substance of this chapter is for the most part an extract from Cicero de Repub. lib. VI. and is a declaration of the supposed analogy between the planets and the sounds in the septenary.

Cap. xxviii. Quæ sit natura consonantiarum.

—Cap. xxix. Ubi consonantiæ reperiuntur.—Cap.

xxx. Quemadmodum Plato dicat fieri consonantias.

—Cap. xxxi. Quid contra Platonem Nicomachus sentiat.—Cap. xxxii. Quæ consonantia quam merito præcedat.—Cap. xxxiii. Quo sint modo accipienda quæ dicta sunt.—Cap. xxxiv. Quid sit musicus.

In this, which is a very curious chapter, the author observes that the theoretic branch of every science is more honourable than the practical, for 'that practice attends like a servant, but reason commands like a mistress; and unless the head executes what reason dictates, its labour is vain.' He adds, 'the speculations of reason borrow no aid of the executive part; but contrarywise, the operations of the hand without the guidance of reason are of no avail;'—that the greatness of the merit and glory of reason may be collected from this; corporeal artists in music receive their appellations, not from the science itself, but rather from the instruments, 'as the citharist from the cithara; the tibicen, or player on the pipe, from the tibia; but he only is the true musician, who, weighing every thing in the balance of reason, professes the science of music, not in the slavery of execution, but in the authority of speculation. In like manner he says those who are employed in the erection of public structures, or in the operations of war, receive no praise except what is due to industry and obedience; but to those by whose skill and conduct buildings are erected, or victory achieved, the honours of inscriptions and triumphs are decreed.' He then proceeds to declare that three faculties are employed in the musical art; one which is exercised in the playing on instruments, another that of the poet, which directs the composition of verses, and a third which

judges of the former two; and touching these, and that which he makes the principal question in this chapter, he delivers his opinion thus: 'As to the first, the performance of instruments, it is evident that the artists obey as servants, and as to poets, they are not led to verse so much by reason as by a certain instinct which we call genius. But that which assumes to itself the power of judging of these two, that can examine into rhythmus, songs, and their verse, as it is the exercise of reason and judgment, is most properly to be accounted music; and he only is a musician who has the faculty of judging according to speculation and the approved ratios of sounds, of the modes, genera, and rhythmici of songs, and their various commixtures, and of the verses of the poets.'

Lib. II. cap. i. Proemium.—Cap. ii. Quid Pythagoras esse philosophiam constituerit.—Cap. iii. De differentiis quantitatis, et quæ cuique disciplinæ sit deputata.—Cap. iv. De Relatæ quantitatis differentiis.—Cap. v. Cur multiplicitas antecellat.—Cap. vi. Qui sint quadrati numeri deque his speculatio.—Cap. vii. Omnem inequalitatem ex equalitate procedere, ejusque demonstratio.—Cap. viii. Regula quotlibet continuas proportionales superparticulares inveniendi.—Cap. ix. De proportionibus numerorum qui ab aliis metiuntur.—Cap. x. Quæ ex multiplicibus et superparticularibus multiplicitates siant.—Cap. xi. Qui superparticulares quos multiplices efficiant.

The nine foregoing chapters contain demonstrations of the five several species of proportion of inequality; of these an explanation may be seen in that extract from Dr. Holder's Treatise on the Natural Grounds and Principles of Harmony, hereinbefore inserted, with a view to facilitate the study of Boetius, and to render this very abstruse part of his work intelligible.

Cap. xii. De arithmetica, geometrica, harmonica, medietate.

The three several kinds of proportionality, that is to say, arithmetical, geometrical, and harmonical, are also explained in the extract from Dr. Holder's book above referred to.

Cap. xiii. De continuis medietatibus et disjunctis.—Cap. xiv. Cur ita appellatæ sint digestæ superius medietates.—Cap. xv. Quemadmodum ab æqualitate supradictæ processerant medietates.—Cap. xvi. Quemadmodum inter duos terminos supradictæ medietates vicissim collocentur.—Cap. xvii. De consonantiarum modo secundum Nicomachum.—Cap. xviii. De ordine consonantiarum sententia Eubulidis et Hippasi.

Two ancient musicians, of whose writings we have nothing now remaining.

Cap. xix. Sententia Nicomachi quæ quibus consonantiis apponantur.—Cap. xx. Quid oporteat præmitti, ut diapason in multiplici genere demonstretur.—Cap. xxi. Demonstratio per impossibile, diapason in multiplici genere esse.—Cap. xxii. Demonstratio per impossibile, diapente, diatessaron, et tonum in superparticulari esse.—Cap. xxiii. Demonstratio diapente et diatessaron in maximis superparticularibus

collocari.—Cap. xxiv. Diapente in sesquialtera, diatessaron, in sesquitertia esse, tonum in sesquioctava.—Cap. xxv. Diapason ac diapente in tripla proportionem esse; bisdiapason in quadrupla.—Cap. xxvi. Diatessaron ac diapason non esse consonantiam, secundum Pythagoricos.

The two last of the foregoing chapters have an immediate connection with each other; in the first it is demonstrated that the diapason and diapente conjoined, making together the consonant interval of a twelfth, are in triple proportion; and that the bisdiapason is in quadruple proportion, the ratios whereof are severally 3 to 1 and 4 to 1; but with respect to the diapason and diatessaron conjoined, the ratio whereof is 8 to 3, the interval arising from such conjunction is clearly demonstrated by Boetius to be dissonant: from hence arises an evident discrimination between the diatessaron and the other perfect consonances; for whereas not only they but their replicates are consonant, this of the diatessaron is simply a consonance itself, its replicates being dissonant. It is true that the modern musicians do not reckon the diatessaron in the number of the consonances; and whether it be a concord or a discord has been a matter of controversy; nevertheless it is certain that among the ancients it was always looked upon as a consonance, and that with so good reason, that Lord Verulam* professes to entertain the same opinion; and yet after all, the imperfection which Boetius has pointed out in this chapter, seems to suggest a very good reason for distinguishing between the diatessaron and those other intervals, which, whether taken singly, or in conjunction with the diapason, are consonant.

Cap. xxvii. De semitonio in quibus minimis numeris constet.

The arguments in this chapter are of such a kind, that it behoves every musician to be master of them. The ratios of the limma and apotome have already been demonstrated in those larger numbers which Ptolemy had made choice of for the purpose. In this chapter Boetius gives the ratio of the limma in the smallest numbers in which it can possibly consist, that is to say, 256 to 243; and as this is the most usual designation of the Pythagorean limma, or the interval, which, being added to two sesquioctave tones, completes the interval of a diatessaron, it is a matter of some consequence to know how these numbers are brought out; and this will best be declared in the words of Boetius himself, which are as follow:—

‘The semitones seem to be so called not that they are exactly the halves of tones, but because they are not whole tones. The interval which we now call a semitone was by the ancients called a limma, or diesis; and it is thus found: if from the sesquitertia proportion, which is the diatessaron, two sesquioctave ratios be taken away, there will be left an interval, called a semitone. To prove this, let us find out two consecutive tones; but because these, as has been said, are constituted in sesquioctave proportion, we cannot find two such, until that multiple from whence they are derived be first

‘found: let therefore unity be first set down, and then 8, which is its octuple: from this we derive one multiple; but because we want to find two, multiply 8 by 8, to produce 64, which will be a second multiple, from which we may bring out two sesquioctave ratios; for if 8, which is the eighth part of 64, be added thereto, the sum will be 72; and if the eighth part of this, which is 9, be added to it, the sum will be 81; and these will be the two consecutive tones, in their lowest terms. Thus, set down 64, 72, 81:—

64	72	81
Tone.		Tone.
Sesquioctave. Sesquioctave.		

‘We are now therefore to seek a sesquitertia to 64; but it is found not to have a third part: wherefore, all these numbers must be multiplied by 3, and all remain in the same proportion as they were in before this multiplication by 3. Then three times 64 makes 192, to which if we add its third part, 64, the sum will be 256; which gives the sesquitertia ratio, containing the diatessaron. Then set down the two sesquioctaves to 192, in their proper order, that is, three times 72, which is 216, and three times 81, which is that 243: these two being set between the terms of the sesquitertia, the whole will stand thus:—

Tone		Tone	Semit.
192	216	243	256
Diatessaron.			

‘In this disposition of the numbers, the first constitutes a diatessaron with the last, and the first with the second, and also the second with the third, do each constitute a tone; therefore the remaining intervals 243 and 256, is a semitone in its least terms.’

Cap. xxviii. Demonstrationes non esse, 243, ad 256, toni medietatem.

That the limma in the ratio 256 to 243 is less than a true semitone, has been already demonstrated in the course of this work.

Cap. xxix. De majore parte toni in quibus minimis numeris constet.

The apotome has no place in the system, nor can it in any way be considered as a musical interval; in short, it is nothing more than that portion of a sesquioctave tone that remains after the limma has been taken therefrom. For this reason, its ratio is a matter of mere curiosity; and it seems from this chapter of Boetius, that the smallest numbers in which it can be found to consist, are those which Ptolemy makes use of, that is to say, 2187 to 2048.

Cap. xxx. Quibus proportionibus diapente, diapason, constant, et quoniam diapason sex tonis non constet.

The demonstrations contained in this chapter are levelled against the Aristoxeneans, and declare so fully the sentiments of the Pythagoreans, with respect

* Nat. Hist. Cent. II. Numb. 107.

to the measure of the consonant intervals, that they are worthy of particular attention, and cannot be better given than in the words of Boetius himself.

'The diatessaron consists of three tones and a semitone, that is, of a diatessaron and a tone: for let the numbers 192, 216, 243, 256, comprehended in the above scheme, be set down thus:—

DIATESSARON.			
192	216	243	256
Tone		Tone	Semitone.

'In this disposition, the first number to the second and the second to the third, bear the proportions of tones, and the third to the fourth that of a lesser semitone, has been shown above. If then for the purpose of ascertaining the contents of the diatessaron, 32 be added to 256, the sum will be 288, which is another sesquioctave tone; for 32 is the eighth part of 256, and 256 to 288, is 8 to 9. The extreme numbers will then be 192 to 288, which is sesquialtera, the ratio of the diatessaron:—

192	288
DIAPENTE	
Sesquialtera.	

'Finally, by comparing the first number with the second, the second with the third, and the fourth with the fifth, *i. e.*, 288, it will plainly appear, first, that in the diapente are three tones, and a lesser semitone. If then the diatessaron consists of two tones and a lesser semitone, and the diapente of three tones and a lesser semitone; and if the diatessaron and diapente make up together the diapasos, it will follow, that in the diapasos are five tones and two lesser semitones, which joined together do not make up a full and complete tone, and therefore that the diapasos does not consist of six tones, as Aristoxenus imagined, which also will evidently appear when

'these intervals are properly disposed in numbers. 'For let six octuples be thus produced:—

1, 8, 64, 512, 4096, 32768, 262144.

'From this last number six tones, constituted in sesquioctave proportion, may be set down, with the octuple terms and their several eighth parts, in the order following:—

Octuples.	
1, 8, 64, 512, 4096, 32768, 262144.	
Sesquioctaves.	262144
	294912
	331776
	373248
	419904
Eighth parts.	472392
	531441
	32768
	36864
	41472
	46656
	52488
	59049

'The nature of the above disposition is this: the first line contains the octuple numbers; and the sesquioctave proportions in the first column are deduced from the last of them. The numbers contained in the second column are the eighth parts of those to which they are respectively opposite; and if each of these be added to the number against it, the sum will be the number of the next sesquioctave, in succession. Thus, if to the number 262144 32768 be added, the sum will be 294912; and the rest are found in the same manner. And were the last number, 531441, duple to the first, 262144, then would the diapasos truly consist of six tones; but here it is found to be more; for the duple of 292144 is 524288, and the number of the sixth tone is 531441. Hence it appears, that the consonant diapasos is less than six tones; and the excess of the six tones above the diapasos is called a comma, which in its lowest terms is 52428 to 531441:—

7153
524288 531441
COMMA, or the interval by which six tones exceed a diapasos.*

Six Octuples.

1	8	64	512	4096	32768	262144
	9	72	576	4608	36864	294912
			648	5184	41472	331776
			729	5832	46656	373248
				6561	52488	419904
					59049	472392
						531441

All the diagonals, are ninefold.

The numbers in the upper row make six octuples, and those placed under them are sesquioctaves to each other in succession.

In the third book Boetius continues his controversy with the Aristoxeneans, who, as they assert, that the diatessaron contains two tones and an half, and the diapente three tones and an half, must be supposed to believe that the tone is capable of a division into two equal parts, contrary to that maxim of Euclid, that 'inter superparticulare non cadit medium,' a superparticular ration cannot have a mediety. And Boe-

tius, in the first chapter of his third book, with great clearness and precision demonstrates, that no such division of the tone can be made, as that which Aristoxenus and his followers contend for.

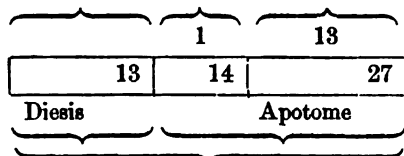
Lib. III. cap. i. Adversus Aristoxenum demonstratio,

* This is called the Pythagorean comma, and is taken notice of by Mercennus, vide Harmonicor. de Diasonantia, pag. 88. It is less than that of 81 to 80, called the comma majus, or schisma, and which is the difference between the greater and lesser tone.

superparticularem proportionem dividi in æqua non posse, atque ideo nec tonum.—Cap. ii. Ex sesquitertia proportione sublati duobus tonis, toni dimidium non relinquere.—Cap. iii. Adversum Aristoxenum demonstrationes, diatessaron consonantiam ex duobus tonis et semitonio non constare, nec diapason sex tonis.—Cap. iv. Diapason consonantiam à sex tonis commata excedi, et qui sit minimus numerus commatis.—Cap. v. Quemadmodum Philolaus, tonum dividat.

Pythagoras found out the tone by the difference of a fourth and fifth, subtracting one from the other; Philolaus, who was of his school, proceeded farther, and effected a division of the tone into commas. The manner of his doing it is thus related by Boetius:—

‘Philolaus the Pythagorean tried to divide the tone, by taking the original of the tone from that number which among the Pythagoreans was esteemed very honourable: for as the number 3 is the first uneven number, that multiplied by 3 will give 9, which being multiplied by 3 will necessarily produce 27, which is distant from the number 24 by a tone, and preserves the same difference of 3; for 3 is the eighth part of 24, and being added thereto completes the cube of the number 3, viz., 27. Philolaus therefore divided this into two parts; one whereof was greater than the half, which he called the apotome; and the other less, which he termed the diesis, and those that came after him denominated a lesser semitone; and their difference he termed a comma. The diesis he supposes to consist of 13 unities, because he supposed that to be the difference between 243 and 256, and because the number 13 consisted of 9, 3, and unity; which unity he considered as a punctum. 3 he considered as the first uneven number, and 9 as the first uneven square: for this reason, when he fixed the diesis or semitone at 13, he made the remaining part of the number 27, containing 14 unities to be the apotome. But because unity is the difference between 13 and 14, he imagined unity ought to be assigned to the place of the comma; but the whole tone he made to be 27 unities, that number being the difference between 216 and 243, which are distant from each other by a tone.’



Cap. vi. Tonum ex duobus semitoniis ac commate constare.—Cap. vii. Demonstratio, tonum duobus semitoniis commate distare.—Cap. viii. De minoribus semitoniis intervallis.—Cap. ix. De toni partibus per consonantias sumendis.—Cap. x. Regula sumendi semitoniis.—Cap. xi. Demonstratio Archytæ, superparticularem in æqua dividi non posse; ejusque reprehensio.

It seems by this chapter, that this Archytas, who it is supposed was he of Tarentum, mentioned in the account herein before given of the genera and their

species, was a Pythagorean. He it seems had undertaken to demonstrate that proposition of the Pythagorean school, that a superparticular ratio cannot be divided into two equally; but Boetius says he has done it in a loose manner, and for this he reprehends him. It may be inferred from this chapter, that some of the writings of Archytas on music were in being in the time of Boetius; but that there are none now remaining is agreed by all.

Cap. xii. In qua numerorum proportione sit comma, et quoniam in ea quæ major sit quam 76 ad 74 minor quam, 74 ad 73.—Cap. xiii. Quod semitonium minus majus quidem sit quam 20 ad 19, minus quam 19½ ad 18½.—Cap. xiv. Semitonium minus, majus quidem esse tribus comatibus; minus vero quatuor.—Cap. xv. Apotome majorem esse quam 4 commata, minorem quam 5. Tonem majorem quam 8, minorem quam 9.—Cap. xvi. Superius dictorum per numeros demonstratio.

Lib. IV. cap. i. Vocum differentias in quantitate consistere.—Cap. ii. Diverse de intervallis speculationes.

This, as its title imports, is a chapter of a miscellaneous kind. Among other things, it contains a demonstration somewhat different from that which he had given before, that six sesquioctave tones are greater than a duple interval. That they are so will appear upon a bare inspection of the following diagram:—

Six sesquioctave proportions greater than a duple interval.						
Sesqui-octave.	Sesqui-octave.	Sesqui-octave.	Sesqui-octave.	Sesqui-octave.	Sesqui-octave.	Sesqui-octave.
A	B	C	D	E	G	K
262144.	294912.	331776.	373248.	419904.	472592.	531441.
The number A 262144. is half the underwritten number; and therefore the diapason is deficient of the number K by 7153.						

The duple interval reaches to 524288.

Cap. iii. Musicarum per Græcos ac Latinas literas notarum nuncupatio.

In this chapter are contained some of the principal characters used by the Greeks in their musical notation. It seems, that at the time when Glareanus published his edition of Boetius, they had been corrupted, which, considering they were arbitrary, or at best that they were the letters of the Greek alphabet reduced to a state of deformity, is not to be wondered at. Meibomius had the good fortune to get intelligence of an ancient manuscript here in England, in which this chapter was found, in a state of great purity. He had interest enough with Mr. Selden to get him to collate his own by it: and the whole is very correctly published, and prefixed to the *Isagoge* of Alypius, in his edition of the ancient musical authors.

Cap. iv. Monochordi regularis partitio in genere diatonico.—Cap. v. Monochordi netarum hyperboleon per tria genera partitio.—Cap. vi. Ratio superius digestæ descriptionis.—Cap. vii. Monochordi netarum diezeugmenon per tria genera partitio.—Cap. viii. Monochordi netarum synemmenon per tria genera

partitio.—Cap. ix. Monochordi meson per tria genera partitio.—Cap. x. Monochordi hypaton per tria genera partitio, et totius dispositio descriptionis.—Cap. xi. Ratio superius dispositæ descriptionis.—Cap. xii. De stantibus et mobilibus vocibus.—Cap. xiii. De consonantiarum speciebus.—Cap. xiv. De modorum exordiis, in quo dispositio notarum per singulos modos ac voces.—Cap. xv. Descriptio continens modorum ordinem ac differentias.—Cap. xvi. Superius dispositæ modorum descriptiones.—Cap. xvii. Ratio superius dispositæ modorum descriptionis.—Cap. xviii. Quemadmodum indubitanter musicæ consonantiæ aure dijudicari possint.

Lib. V. Proemium.

In this Boetius gives the form of the monochord, little differing from that of Ptolemy and Porphyry herein before described.

Cap. i. De vi harmonicæ, et quæ sint ejus instrumenta judicii, et quo nam usque sensibus oporteat credi.—Cap. ii. Quid sit harmonica regula, vel quam intentionem harmonici Pythagorici, vel Aristoxenus, vel Ptolemæus esse dixerent.—Cap. iii. In quo Aristoxenus, vel Pythagorici, vel Ptolemæus gravitatem atque acumen constare posuerint.—Cap. iv. De sonorum differentis Ptolemæi sententia.—Cap. v. Quæ voces enharmonici sunt aptæ.—Cap. vi. Quem numerum proportionum Pythagorici statuunt.—Cap. vii. Quod reprehendat Ptolemæus Pythagoricos in numero proportionum.—Cap. viii. Demonstratio secundum Ptolemæum diapason et diatessaron consonantiæ.—Cap. ix. Quæ sit proprietas diapason consonantiæ.—Cap. x. Quibus modis Ptolemæus consonantias statuatur.—Cap. xi. Quæ sunt equisonæ, vel quæ consonæ, vel quæ emmelis.—Cap. xii. Quemadmodum Aristoxenus intervallum consideret.—Cap. xiii. Descriptio octochordi, qua ostenditur diapason consonantiam minorum esse sex tonis.—Cap. xiv. Diatessaron consonantiam tetrachordo contineri.—Cap. xv. Quomodo Aristoxenus vel tonum dividat vel genera ejusque divisionis dispositio.—Cap. xvi. Quomodo Archytas tetrachordo dividat, eorumque descriptio.—Cap. xvii. Quemadmodum Ptolemæus et Aristoxeni et Archytæ, tetrachordorum divisiones reprehendat.—Cap. xviii. Quemadmodum tetrachordorum divisionem fieri dicat oportere.

CHAP. XXVI.

From the foregoing extracts a judgment may be formed, not only of the work from which they are made, but also of the manner in which the ancients, more especially the followers of Pythagoras, thought of music. Well might they deem it a subject of philosophical speculation, when such abstruse reasoning was employed about it. To speak of Boetius in particular, it is clear that he was upon the whole a Pythagorean, though he has not spared to detect many of the errors imputed to that sect; and his work is so truly theoretic, that in reading him we never think of practice: the mention of instruments, nor of the voice, as employed in singing, never occurs; no allusions to the music of his time, but all abstracted speculation, tending doubtless to the per-

fection of the art, but seemingly little connected with it. Here then the twofold nature of music is apparent: it has its foundation in number and proportion; like geometry, it affords that kind of pleasure to the mind which results from the contemplation of order, of regularity, of truth, the love whereof is connatural with human nature; like that too, its principles are applicable to use and practice. View it in another light, and if it be possible, consider music as mechanical, as an arbitrary constitution, as having no foundation in reason: but how exquisite is the pleasure it affords! how subservient are the passions to its influence! and how much is the wisdom and goodness of God manifested in that relation which, in the case of music, he has established between the cause and the effect!

That Boetius is an obscure writer must be allowed; the very terms used by him, and his names for the proportions, though they are the common language of the ancient arithmeticians, are difficult to be understood at this time. Guido, who lived about five hundred years after him, scruples not to say, that 'his work is fit only for philosophers.' It was, nevertheless, held in great estimation for many centuries, and to this its reputation many causes co-operated; to which may be added that the Greek language was little understood, even by the learned, for a much longer period than that above mentioned; and to those few that were masters of it, all that treasure of musical erudition contained in the writings of Aristoxenus, Euclid, Nicomachus, Ptolemy, and the rest of the Greek harmonicians, was inaccessible. So late as the time of our queen Elizabeth, it was doubted whether the writings of some of them were any where extant in the world.*

For these reasons, we are not to wonder that the Treatise de Musica of Boetius was for many ages looked upon as the grand repository of harmonical science. To go no farther than our own country for proofs, the writings of all who treated on the subject before the beginning of the fourteenth century, and whose names are preserved in the collections of Leland, Bale, Pits, and Tanner, are but so many commentaries on him: nay, an admission to the first degree in music, in the universities of Oxford and Cambridge, was but a kind of manuduction to the study of his writings;† and in the latter the exercise for a doctor's degree was generally a lecture on Boetius.‡

And, to come nearer to our own times, Salinas and Zarlino have pursued the same train of reasoning that Boetius first introduced. If it be asked how has this contributed to the improvement of music, the answer is not easy, if the question refers to the practice of it; since what Mersennus and others have said is very true, that in the division of sounds we are determined wholly by the ear, and not by ratios; and therefore the makers and tuners of instruments are in

* Morley, in the *Peroratio* to his *Introduction*.

† Wood, in the *Fasti*. Oxon. pag. 58, says, of bachelors of music, that they were such who were admitted to the reading any of the musical books of Boetius; and in his account of John Mendus, a secular priest, who, anno 1535, supplicated for that decree, he says, he obtained it with the privilege of reading Boetius. *Fasti*. Oxon. pag. 66.

‡ Athen. Oxon. *passim*.

fact, though they know it not, Aristoxeneans; but if by Music we are to understand the Theory of the science, this method of treating it has contributed greatly to its improvement. This is enough to satisfy such as are aware of the importance of theory in every science: those whose minds are too illiberal to conceive any thing beyond practice and mere manual operation or energy, might perhaps demand, What has theory, what have the ratios of numbers to do with an art, the end whereof is to move the passions, and not convince the understanding; were these considered, or even understood, by the ablest professors of the science; did Palestrina, Stradella, did Corelli adjust their harmonies by the monochord, or consult Euclid or Ptolemy when they composed respectively their motets, madrigals, and concertos; or is it necessary in the performance of them that the singers, or any of those who perform on an instrument, the tuning whereof is not adjusted to their hands, perpetually bear in mind the true harmonic canon, and be aware of the difference between the greater and lesser tone, and the greater and lesser semitone; and that what in common practice is called a semitone, is in fact an interval in the ratio of 256 to 243, and unless so prolated is a dissonance? And after all it may perhaps be argued that this kind of knowledge adds nothing to the pleasure we receive from music.

To such as are disposed to reason in this manner it may be said, We all know that the dog who treads the spit-wheel; or to go higher, the labourer that drives a wedge, or adds the strength of his arms to a lever, are ignorant of all but the effects of their labour; but we also know that the ignorance of the brute and of the uninstructed rational in this respect afford no reason why others are to remain ignorant too; much less does it prove it fruitless and vain for men of a philosophical and liberal turn of mind to attempt an investigation of the principles upon which these machines act.*

Farther, as a motive to the study of the ratios and coincidences of harmonic intervals, it may be said that the noblest of our faculties are exercised in it; and that the pleasure arising from the contemplation of that truth and certainty which are found in them, is little inferior to what we receive from hearing the most excellent music. And to this purpose the learned and ingenious Dr. Holder expresses himself in a passage which is inserted in a note subjoined.†

* The reader will find this argument much better enforced by the learned and ingenious author of a treatise intitled *Hermes* or a Philosophical Inquiry concerning Universal Grammar. Here it was necessary to vary it, in order to adapt it to the present subject; but the author applies it to that of speech; the whole passage is very beautiful, and is as follows:—'Methinks I hear some objector, demanding with an air of pleasantry and ridicule—Is there no speaking then without all this trouble? Do we not talk every one of us, as well unlearned as learned, as well poor peasants as profound philosophers? We may answer by interrogating on our part—Do not those same poor peasants use the lever and the wedge, and many other instruments, with much habitual readiness? And yet have they any conception of those geometrical principles from which those machines derive their efficacy and force? And is the ignorance of these peasants a reason for others to remain ignorant, or to render the subject a less becoming enquiry? Think of animals and vegetables that occur every day—of time, of place, and of motion—of light, of colours, and of gravitation—of our senses and intellects by which we perceive every thing else—That they are, we all know and are perfectly satisfied—What they are, is a subject of much obscurity and doubt; were we to reject this last question because we are certain of the first, we should banish all philosophy at once out of the world.' *Hermes*, pag. 293.

† 'And in searching, stating, and comparing the ratios of those in-

After all, we ought not to estimate the works of learned men by the consideration of their immediate utility: to investigate is one thing; to apply, another; and the love of science includes in it a degree of enthusiasm, which whoever is without, will want the strongest motive to emulation and improvement that the mind is susceptible of. Is it to be conceived that those who are employed in mathematical researches attend to the consequences of their own discoveries, or that their pursuits are not extended beyond the prospect of bare utility? In short, no considerable progress, no improvement in any science can be expected, unless it be beloved for its own sake: as well might we expect the continuation of our species from principles of reason and duty, abstracted from that passion which holds the animal world in subjection, and to which human nature itself owes its existence.‡

Taking this for granted, the merit of Boetius will appear to consist in the having communicated to the world such a knowledge of the fundamental principles of the ancient music, as is absolutely necessary to the right understanding even of our own system: and this too at a period when there was little or no ground to hope for any other intelligence, and therefore Morley has done him but justice in the eulogium which he has given of him in the following words:—'Boetius being by birth noble, and most excellent well versed in divinity, philosophy, law, mathematics, poetry, and matters of estate, did notwithstanding write more of musick than of all the other mathematical sciences, so that it may be justly said, that if it had not been for him the knowledge of musicke had not yet come into our western part of the world. The Greek tongue lying as it were dead

Intervals of sounds by which harmony is made, there is found so much variety and certainty, and facility of calculation, that the contemplation of them may seem not much less delightful than the very hearing the good music itself, which springs from this fountain; and those who have already an affection for music cannot but find it improved and much enhanced by this pleasant and recreating chase, as I may call it, in the large field of harmonic ratios and proportion, where they will find, to their great pleasure and satisfaction, the hidden causes of harmony (hidden to most, even to practitioners themselves) so amply discovered and laid plain before them.' *Natural Grounds and Principles of Harmony*, chap. v.

‡ For the farther illustration of this proposition, viz., that knowledge is an object worthy to be pursued for its own sake, we must be indebted to the author above-cited, who to this purpose thus expresses himself:—

'But a graver objector now accosts us. What (says he) is the utility, whence the profit, where the gain? Every science whatever (we may answer) has its use. Arithmetic is excellent for gauging of liquors; geometry for measuring of estates; astronomy for making of almanacks; and grammar perhaps for drawing of bonds and conveyances. 'Thus much to the sordid—If the liberal ask for something better than this, we may answer, and assure them from the best authorities, that every exercise of the mind upon theorems of science, like generous and manly exercise of the body, tends to call forth and strengthen nature's original vigour. Be the subject itself immediately lucrative or not, the nerves of reason are braced by the mere employ, and we become abler actors in the drama of life, whether our part be of the busier, or of the sedater kind.

'Perhaps too there is a pleasure even in science itself, distinct from any end to which it may be farther conducive. Are not health and strength of body desirable for their own sakes, though we happen not to be fated either for porters or draymen? And have not health and strength of mind their intrinsic worth also, though not condemned to the low drudgery of sordid emolument? Why should there not be a good (could we have the grace to recognise it) in the mere energy of our intellect, as much as in energies of lower degree? The sportsman believes there is good in his chase; the man of gaiety, in his intrigue; even the glutton in his meal. We may justly ask of these, why they pursue such things; but if they answer they pursue them because they are good, 't would be folly to ask them farther, why they pursue what is good. It might well in such case be replied on their behalf (how strange soever it may at first appear) that if there was not something good, which was in no respect useful, even things useful themselves could not possibly have existence. For this is in fact no more than to assert, that some things are ends, some things are means; and that if there were no ends, there could be of course no means.' *Hermes*, pag. 294.

'under the barbarisme of the Gothes and Hunnes, and musicke buried in the bowels of the Greeke works of Ptolemeus and Aristoxenus, the one of which as yet hath never come to light, but lies in written copies in some bibliothekes of Italy, the other hath been set out in print; but the copies are every where so scant and hard to come by, that many doubt if he have been set out or no.' *

Other improvements were reserved for a more enlightened age, when the study of physics began to be cultivated, when the hypotheses of the ancients were brought to the test of experiment; and the doctrine of pendulums became another medium for demonstrating the truth of those ratios which the ancient harmonicians had investigated merely by the power of numbers.

To the reasons above adduced in favour of the writings of Boetius, another may be added, which every learned reader will acquiesce in, namely, that he was the last of the Latin writers whose works have any pretence to purity, or to entitle them to the epithet of classical.

It must however be confessed that the treatise *De Musica* of Boetius is but part of a much larger discourse which he intended on that subject: most authors speak of it as of a fragment, and the very abrupt manner in which it concludes shews that he had not put the finishing hand to it. The whole of the five books extant are little more than an investigation of the ratio of the consonances, the nature of the several kinds of proportionality, and a declaration of the opinions of the several sects with respect to the division of the monochord and the general laws of harmony: these are, it is true, the foundations of the science, but there remained a great deal more to be said in order to render this work of Boetius complete; and that it was his design to make it so, there is not the least reason to doubt.

The desiderata of the ancient music seem to be the genera and the modes, and to these may be added the measure of sounds in respect of their duration, or, in other words, the laws of metre. It is to be observed that music was originally vocal, and in that species of it the voice was employed, not in the bare utterance of inarticulate sounds, but of poetry, to the words whereof correspondent sounds in an harmonical ratio were adopted, and therefore the duration of those sounds might be, and probably was determined by the measure of the verse, yet both were subject to metrical laws, which had been largely discussed before the time of Boetius, and these it became a writer like him to have reduced to some standard.

Had Boetius lived to complete his work, it is more than probable that he would have entered into a discussion of the modes of the ancients, and not left it a question, as it is at this day, whether they regarded only the situation of the final or dominant note in respect of the scale, or whether they consisted in the different position of the tones and semitones in the system of a diapason. For the same reason we may conclude that, had not his untimely death prevented it, Boetius would have treated very largely

on the ecclesiastical tones: he was a Christian, and, though not an enthusiast, a devout man; music had been introduced into the church-service for above a century before the time when he lived; St. Ambrose had established the chant which is distinguished by his name, and the ecclesiastical tones, then but four in number, were evidently derived from the modes of the ancients.

These are but conjectures, and may perhaps be thought to include rather what was to be wished than expected from a writer of so philosophical a turn as Boetius; we have nevertheless great reason to lament his silence in these particulars, and must impute the present darkness in which the science is unhappily involved, to the want of that information which he of all men of his time seems to have been the most able to communicate.

MAGNUS AURELIUS CASSIODORUS, senator, a christian, born at Brutium, on the confines of Calabria, flourished about the middle of the sixth century. He had a very liberal education considering the growing barbarism of the age he lived in, and by his wisdom, learning, and eloquence, recommended himself to the protection of the Gothic kings Theodoric and Athalaric, Amalasuentha the daughter of the former, Theodohadus her husband, and Vitiges his successor. Theodoric appointed him to the government of Sicily, in which province he gave such proofs of his abilities, that in the year 490 he made him his chancellor, and admitted him to his councils. After having filled several important and honourable posts in the state, he was advanced to the consulate, the duties of which office he discharged without any colleague in the year 514. He was continued in the same degree of confidence and favour by Athalaric, who succeeded Theodoric about the year 526; but in the year 537, being dismissed from all his employments by Vitiges, he betook himself to a religious life. Trithemius says he became a monk, and afterwards abbot of the monastery of Ravenna; after which it seems he retired to the monastery of Viviers, in the extreme parts of Calabria, which he had built and endowed himself. In his retirement from the business of the world he led the life of a scholar, a philosopher, and a Christian, amusing himself at intervals in the invention, and framing of mechanical curiosities, such as sun-dials, water hour-glasses, perpetual lamps, &c. He collected a very noble and curious library, and wrote many books himself, particularly Commentaries on the Psalms, Canticles, the Acts of the Apostles, the Epistles of St. Paul, and the Apocalypse, and a Chronology: farther he framed, or drew into one body, the tripartite history of Socrates, Sozomen, and Theodoret, translated by Epiphanius, the scholastic. He wrote also *Institutionem Divinarum Lectionum*, in two books, which Du Pin says abounds with fine remarks on the Holy Scriptures, and a treatise *De Ratione Animæ*, which the same writer also highly commends. There are extant of his, twelve books of Letters, ten of which are written in the names of Theodoric and Athalaric, he being it seems secretary to them both; the other two are in his own name, and they all abound with a

* See the Peroratio to his Introduction, towards the end.

variety of curious and interesting particulars. He was also the author of a treatise *De septem Disciplinis*, or of the Arts of Grammar, Rhetoric, Logic, Arithmetic, Geometry, Music, and Astronomy;* what he says of music is contained in one chapter or section of four quarto pages; in this he is very brief, referring very often to Gaudentius, Censorinus, and other writers. His general division of music is into three parts, harmonic, rhythmic, and metric. His division of instrumental music is also into three parts, namely, percussional, tensile, and inflatile, agreeing in this respect with other writers of the best authority.

One thing worthy of remark in the treatise of Cassiodorus *De Musica* is, that he makes the consonances to be six, namely, the diatessaron, diapente, diapasen, diapasen and diatessaron, or eleventh, diapasen and diapente, or twelfth, and, lastly, the di-diapasen; in which he manifestly differs from Boetius, whom he must have known and been intimate with, for Boetius has bestowed a whole chapter in demonstrating that the diapasen cum diatessaron is not a consonant but a dissonant. Cassiodorus makes the number of the modes, or, as he calls them the tones, to be fifteen; from which circumstance, as also because he here prefers the word Tone to Mode, it may be concluded that he writes after Martianus Capella.

Cassiodorus died at his monastery of Viviers, about the year 560, aged above ninety. Father Simon has given a very high character of his theological writings; they, together with his other works, have been several times printed, but the best edition of them is that of Rohan, in the year 1679, in two volumes folio, with the notes and dissertations of Johannes Garetius, a Benedictine monk.†

The several improvements of music hereinbefore

* This arrangement of the liberal sciences had been made before the time of Cassiodorus, as appears by the fable *De Nuptiis Philologie et Mercurii* of Martianus Capella, which contains a separate discourse on each of them. This division comprehends both the trivium and the quadrivium described in a preceding page. Mosheim censures the professors, or scholastics, as they were called, of that day, for teaching the sciences in a barbarous and illiberal manner.

† The whole circle of sciences was composed of what they called the seven liberal arts, viz., grammar, rhetoric, logic, arithmetic, music, geometry, and astronomy; the three former of which they distinguished by the title of trivium, and the four latter by that of quadrivium. Nothing can be conceived more wretchedly barbarous than the manner in which these sciences were taught, as we may easily perceive from Alcuin's treatise concerning them; and the dissertations of St. Augustin on the same subject, which were in the highest repute at this time. In the greatest part of the schools the public teachers ventured no farther than the trivium, and confined their instructions to grammar, rhetoric, and logic; they, however, who, after passing the trivium, and also the quadrivium were desirous of rising yet higher in their literary pursuits, were exhorted to apply themselves to the study of Cassiodorus and Boetius, as if the progress of human knowledge was bounded by the discoveries of those two learned writers. *Ecclesiast. Hist. Cent. VIII. part II. cap. I.*

† Upon the writings of the Latins the remark is obvious, that they added nothing to musical science; and indeed their inferiority to the Greeks, both in philosophy and the more elegant arts, seems to be allowed by the best judges of ancient literature.

Indeed in their practice of music they seem to have somewhat improved on that of their predecessors, as is evident from Vitruvius's description of the hydraulic organ, an instrument which Sidonius Apollinaris takes notice of in one of his epistles, where he speaks of the amusements of Theodoric, and particularly adds that he was wont to be entertained with the music of the hydraulic organ while he sat at dinner: and it is in the history of the period in which Boetius and Cassiodorus flourished, that we meet with the first intimation of such a profession as that of a teacher of music. The following is an epitaph in the epistles of the same Sidonius Apollinaris on one of this profession:—

Orator Dialecticus Poeta
Tractator, Geometra, Musicus
Psallorum Modulator, Phonascus
Instructas docuit sonare classes. Lib. IV. pag. 143.

enumerated, regarded chiefly the theory of the science, those that followed were for the most part confined to practice: among the latter none have a greater title to our attention than those made about the end of the sixth century, by St. Gregory the Great, the first pope of that name, a man not more remarkable for his virtues than for his learning and profound skill in the science of music.

The first improvement of music made by this father consisted in the invention of that kind of notation by the Roman letters, which is used at this day. It is true that before his time the use of the Greek characters had been rejected; and as the enarmonic and chromatic genera, with all the various species of the latter, had given way to the diatonic genus, the first fifteen letters of the Roman alphabet had even before the time of Boetius been found sufficient to denote all the several sounds in the perfect system; and accordingly we find in his treatise *De Musica* all the sounds from Proslambanomenos to Nete hyperboleon characterised by the Roman letters, from A to P inclusive; but Gregory reflecting that the sounds after Lychanos meson were but a repetition of those before it, and that every septenary in progression was precisely the same, reduced the number of letters to seven, which were A, B, C, D, E, F, G; but, to distinguish the second septenary from the first, the second was denoted by the small, and not the capital, Roman letters; and when it became necessary to extend the system farther, the small letters were doubled thus, aa, bb, cc, dd, ee, ff, gg.

But the encreasing the number of tones from four to eight, and the institution of what is called the Gregorian Chant, or plain song, is the improvement for which of all others this father is most celebrated. It has already been mentioned that St. Ambrose when he introduced singing into the church-service, selected from the ancient modes four, which he appropriated to the several offices: farther it is to be observed, that to these modes the appellation of Tones was given, probably on the authority of Martianus Capella, who, as Sir Henry Spelman remarks, was the first that substituted the term Tones in the room of Modes. But we are much at a loss to discover more of the nature of the tones instituted by St. Ambrose, than that they consisted in certain progressions, corresponding with different species of the diapasen; and that under some kind of regulation, of which we are now ignorant, the divine offices were alternately chanted, and this by the express institution of St. Ambrose himself, who all agree was the first that introduced the practice of alternate or antiphonal singing, at least into the western church; but it was such a kind of recitation as in his own opinion came nearer to the tone of reading than singing.‡

Cardinal Bonaß cites Theodoret, lib. IV. to prove that the method of singing introduced by St. Ambrose was alternate; and proceeds to relate that as the vigour of the clerical discipline, and the majesty of

‡ Voësius *De Scientiis mathematicis*, cap. xxi. § II.

§ *De Rebus Liturgicis*.

the Christian religion eminently shone forth in the ecclesiastical song, the Roman pontiffs and the bishops of other churches took care that the clerks from their tender years should learn the rudiments of singing under proper masters; and that accordingly a music-school was instituted at Rome by pope Hilary, or, as others contend, by Gregory the Great, to whom also we are indebted for restoring the ecclesiastical song to a better form; for though the practice of singing was from the very foundation of the Christian church used at Rome, yet are we ignorant of what kind the ecclesiastical modes were, before the time of Gregory, or what was the discipline of the singers. In fact the whole service seems to have been of a very irregular kind, for we are told that in the primitive church the people sang each as his inclination led him, with hardly any other restriction than that what they sang should be to the praise of God. Indeed some certain offices, such as the Lord's Prayer and the Apostles' Creed, had been used in the church-service almost from the first establishment of Christianity;* but these were too few in number to prevent the introduction of hymns and spiritual songs at the pleasure of the heresiarchs, who began to be very numerous about the middle of the sixth century, and that to a degree which called aloud for reformation. The evil increasing, the emperor Theodosius requested the then pope, Damasus, to frame such a service as should consist with the solemnity and decency of divine worship; the pope readily assented, and employed for this purpose a presbyter named Hieronymus, a man of learning, gravity, and discretion, who formed a new ritual, into which he introduced the Epistles, Gospels, and the Psalms,† with the Gloria Patri and Alleluiah; and these, together with certain hymns which he thought proper to retain, made up the whole of the service.

It is very doubtful whether any thing like an antiphony existed at this time, or indeed whether St. Ambrose did any thing more than institute the tones, leaving it to the singers, under the regulations thereby prescribed, to adapt such musical sounds to the several offices as they should from time to time think fit; and to this the confusion that had arisen in the church-service was in a great measure owing. What methods were taken by Gregory to remedy this evil will be related in the following account of him.

CHAP. XXVII.

GREGORY THE FIRST, surnamed the Great, was born at Rome of an illustrious family, about the year 550. He studied with great success, and his quality and merit so recommended him, that the emperor Justin the younger made him prefect of that city. After he had held this high office for some time, he discovered that it made him too fond of the world, and thereupon he retired to a convent which he had founded in his own house at Rome; but he was soon called out of this retirement by pope Pelagius II., who, in

582, made him one of his deacons, and sent him to Constantinople, there to reside in the court of the emperor Tiberius, in quality of his nuncio or surrogate, though his immediate business there was to solicit succours against the Lombards. Upon the death of Tiberius in 586, Gregory returned to Rome, and was there employed as secretary to Pelagius; but at length he obtained of him leave to retire again to his monastery, the government whereof he had formerly bestowed on an ecclesiastic named Valentius, whom for his great merit he had taken from a monastery in the country. Here he thought to indulge himself in the pleasures of a studious and contemplative life, but was soon drawn from his retirement by a contagious disease, which at that time raged with such violence, that eight hundred persons died of it in one hour.‡ To avert this calamity Gregory quitted his retreat, came forth into the city, and instituted litanies§ and a sevenfold procession, consisting of several orders of the people, upon whose arrival at the great church it is said the distemper ceased. Of this disease Pelagius himself died, and by the joint suffrage of the clergy, the senate, and people of Rome, Gregory was chosen for his successor; but he was so little disposed to accept this dignity, that he got himself secretly conveyed out of the city in a basket, thereby deceiving the guards that were set at the gates to hinder his escape, and went and hid himself in a cave in the middle of a wood; but being discovered, he was prevailed on to return, and was consecrated on the third of September, 590, and was the first of the popes that used the style 'Servus servorum Dei.' He was of a very infirm and weakly constitution, but had a vigorous mind, and discharged the duties of his station with equanimity and firmness. He possessed a great share of learning, and was so well skilled in the tempers and dispositions of mankind, that he made even the private interests and ambitious views of princes subservient to the ends of religion. One of the greatest events which by his prudence and good management he brought about during his pontificate, was the conversion of the English to Christianity, which, as related by Bede, makes one of the prettiest stories in our history. But what gives him a title to a place in this work is his having effected a reformation in the music of the church.||

‡ One of the symptoms of this disease was a violent sneezing, which was looked upon as mortal, and upon this occasion gave rise to the ejaculation 'God bless you!' in favour of such as were suddenly taken with that convulsion. Isaacson's Chronology, anno. 590.

§ The word *Litany*, taken in its larger sense, includes public prayers of all kinds, but in its limited signification it denotes that kind of prayer attended with *rogations* which was formerly used in the church to deprecate impending judgments. Of these Mamercus, bishop of Vienna about the year 460, and Sidonius bishop of Aversa, are said to have been the institutors, but some writers refer the first use of them to the time of St. Basil. The *Litany* instituted by St. Gregory was that named *Litania Septiformis*, which, as Hooker asserts, contains the flower of the former *Litania*, and with this, the *Litany* now used in our church very nearly corresponds. Confer. Bingham, *Antiq.* Book XIII, chap. 1. See, *et.* Hook. *Eccles. Pol.* Book V. Sec. 41. *Lestrange's Alliance of Divine Offices*, Annot. on Chap. IV.

|| Johannes Diaconus, who wrote the life of this pope, says that he imitated the most wise Solomon in this respect; and that he with infinite labour and great ingenuity composed an antiphony; and other writers add a gradual also, not in the way of compilation, or by collecting the offices therein contained, but that he dictated or pointed, and actually neumatized the musical cantus both to the antiphony and gradual. *Neuma* is a word possibly derived from the Greek *νεῦμα*, and, as explained by Sir Henry Spelman, signifies an aggregation of as many

* Nivern sur le Chant Gregorien, chap. I.

† Ibid. Damasus is said to have first introduced the Psalms into the service. Platina in Damasus, Isaac. Chron. anno 371.

Maimbourg in his *Histoire du Pontificat de St. Gregoire* has collected from Johannes Diaconus and others, all that he could find on this subject. The account given by him is as follows:—

‘He especially applied himself to regulate the office and the singing of the church, to which end he composed his antiphony—nothing can be more admirable than what he did on this occasion. Though he had upon his hands all the affairs of the universal church, and was still more burthened with distempers than with that multitude of business which he was necessarily to take care of in all parts of the world, yet he took time to examine with what tunes the psalms, hymns, oraisons, verses, responses, canticles, lessons, epistles, the gospel, the prefaces, and the Lord’s Prayer were to be sung; what were the tones, measures, notes, moods, most suitable to the majesty of the church, and most proper to inspire devotion; and he formed that ecclesiastical music so grave and edifying, which at present is called the Gregorian music. He moreover instituted an academy of singers for all the clerks to the deaconship exclusively, because the deacons were only to be employed in preaching the Gospel and the distributing the alms of the church to the poor; and he would have the singers to perfect themselves in the art of true singing according to the notes of his music, and to bring their voices to sing sweetly and devoutly; which, according to St. Isidore, is not to be obtained but by fasting and abstinence: for, says he, the ancients fasted the day before they were to sing, and lived for their ordinary diet upon pulses, to make their voices clearer and finer; whence it is that the heathens called those singers bean-eaters.* * * * * However, St. Gregory took care to instruct them himself, as much a pope as he was, and to teach them to sing well. Johannes Diaconus says, that in his time, this pope’s bed was preserved with great veneration, in the palace of St. John of Lateran, in which he sang, though sick, to teach the singers; as also the whip, wherewith he threatened the young clerks and the singing boys, when they were out, and failed in the notes.’

The account given by Johannes Diaconus is somewhat more particular than that of Maimbourg, and is to this effect:—‘Gregory instituted a singing school, and built two houses for the habitation of the scholars, and endowed them with ample revenues; one of these houses was near the stairs of the church of St. Peter, and the other near the Lateran palace. For many ages after his death, the bed on which he modulated as he lay, and the whip which he used to terrify the younger scholars, were preserved with a becoming veneration, together with the authentic antiphony, above said to have been compiled by him.†

sounds as may be uttered in one single respiration. Spelm. Gloss. voce *NEUMA*: and in this sense it is used by Guido himself, Franchinus, and other writers.

* ‘Pride quam cantandum erat cibis abstinebant psallentes, legumine in causâ vocis assidue utebantur, unde et cantores apud gentiles Fabarii dicti sunt.’ Isid. de Eccl. Offic. lib. II. cap. xii.

† ‘Deinde in domo Domini (Divus Gregorius) more sapientissimi Salomonis propter musicæ compunctionem dulcedinis, antiphonarum centonem cantorum studiosissimus nimis utiliter compilavit. Scholam quoque cantorum, quæ hactenus ejusdem institutionibus in Sancta

Other additions to and improvements of the service are attributed to St. Gregory. It is said, that he added the prayers, particularly this, ‘Diesque nostros in pace disponas,’ and the Kyrie Eleeson, and the Alleluia, both which he took from the Greek liturgy; and that he introduced many hymns, and adopted the responsaria to the lessons and gospels: nay, some have gone so far as to assert that he invented the stave. Kircher speaks of a MS. eight hundred years old, which he had seen, containing music, written on a stave of eight lines; but Vincentio Galilei, in his *Dialogo della Musica*, shews that it was in use before Gregory’s time:‡ this is a matter of some uncertainty; but the merit of substituting the Roman letters in the room of the Greek characters, the reformation of the antiphony, the foundation and endowment of seminaries for the study of music, and the introduction of four additional tones, are certainly his due; and these are the chief particulars which historians have insisted on, to shew Gregory’s affection for music. The augmentation of the tones must doubtless be considered as a great improvement; the tones, as they stood adjusted by St. Ambrose, were only four, and are defined by a series of eight sounds, in the natural or diatonic order of progression, ascending from D, from E, from F, and from G, in the grave, to the same sounds in the acute.

But before the nature of this improvement can be understood, it must be premised, that although the ecclesiastical tones, consisting merely of a varied succession of tones and semitones, in a gradual ascent from the lower note to its octave, answer exactly to the several keys, as they are called by modern musicians; yet in this respect they differ; for in modern compositions the key-note is the principal, and the whole of the harmony has a relation to it; but the modes of the church suppose another note, to which that of the key seems to be but subordinate, which is termed the Dominant, as prevailing, and being most frequently heard of any in the tone; the other, from whence the series ascends, is called the Final.§

Farther, to understand the nature and use of this distinction between the dominant and final note of every tone, it is to be observed, that at the introduction of music into the service of the Christian church, it was the intent of the fathers that the whole should be sung, and no part thereof said or uttered in the tone or manner of ordinary reading or praying.

‘Romana Ecclesia modulatur constituit; eique cum nonnullis præditi duo habitacula; scilicet, alterum sub gradibus Basilicæ B. Petri Apostoli, alterum verò sub Lateranensis Ecclesiæ Patriarchii domibus fabricavit; ubi usque hodie lectus ejus, in quo recubans modulabatur, et flagellam ipsius, quo pueri minabatur veneratione congrua, cum authentico antiphonario reservatur.’ Johann. Diacon. in Vita Greg. lib. II. cap. vi. Johannes Diaconus flourished about the year 880; so that these relics might have been two hundred and seventy years old at the time when he wrote the life of Gregory.

‡ It is worthy of remark, that the musical stave has varied in its limits since it was first invented. By the passage in Galilei above referred to, it seems to have been originally contrived to include the system of a diatonic, as containing eight lines; on which only, and not in the spaces, the points or notes were originally placed. Guido Aretinus, by making use of the spaces, reduced it to five lines. After his time, that is to say in the thirteenth century, the stave was finally settled at four lines, in consequence, it is supposed, of that correction of the antiphony of the Cistercian order, which St. Bernard undertook and perfected some years before; and this number has ever since been found sufficient for the notation of the Cantus Gregorianus.

§ Niv. sur le Chant Gregorien, chap. xii.

K

It seemed therefore necessary, in the institution of a musical service, so to connect the several parts of it as to keep it within the bounds of the human voice; and this could only be done by restraining it to some one certain sound, as a medium for adjusting the limits of each tone, and which should pervade the whole of the service, as well the psalms and those portions of scripture that were ordinarily read to the people, as the hymns, canticles, spiritual songs, and other parts thereof, which, in their own nature, were proper to be sung.

Hence it will appear, that in each of the tones it was necessary not only that the concords, as, namely, the fourth, the fifth, and the octave, should be well defined; but that the key-note should so predominate as that the singers should never be in danger of missing the pitch, or departing from the mode in which the service should be directed to be sung; this distinction, therefore, between the dominant and final, must have existed at the early time of instituting the Cantus Ambrosianus, and the same prevails at this day.

The characteristics of the four primitive modes were these: in each of them the diatessaron was placed above the diapente, which is but one of the two kinds of division of which the diatessaron is susceptible. Gregory was aware of this, and interposed four other tones between the four instituted by St. Ambrose, in which the diapente held the uppermost place in the diatessaron: in short, the tones of St. Ambrose arise from the arithmetical, and those of St. Gregory from the harmonical, division of the diatessaron.* The addition of the four new tones gave rise to a distinction which all the writers on the subject have adopted; and accordingly those of the first class have the epithet of Authentic, and the latter that of Plagal: the following diagram may serve to shew the difference between the one and the other of them:—

	1	3	5	7	
	d	e	f	g	
	c	d	e	f	
	b	c	d	e	
	a	b	c	d	
Diatessaron.	G	a	b	c	Diatessaron.
Diapente.	F	G	a	b	
	E	F	G	a	
	D	E	F	G	
	C	D	E	F	
	b	C	D	E	
	A	b	C	D	
	2	4	6	8	

Occasion has already been taken to remark, that

* We have no authentic formula of the tones in musical characters more ancient than what is to be found in the writings of Franchinus: there is indeed one in MS. in the British Museum, which was part of the Cotton library, Nero, A. xii. 13, beginning 'Si vis scire artem musicam;' but the notes, which were written in red ink, are effaced by time.

there are three different species of diatessaron, and four of diapente; and that from the conjunction of these two, there arise seven species of diatessaron. Authors have differed in their manner of characterising these several systems, as may be seen in Bon-tempi, who calls the comparison of them an unprofitable operation.† That of Gaffurius seems best to correspond with the notions of those who have written professedly on the Cantus Gregorianus, particularly of Erculeo, who, in his treatise, intitled *Il Canto Ecclesiastico*, has thus defined them:—

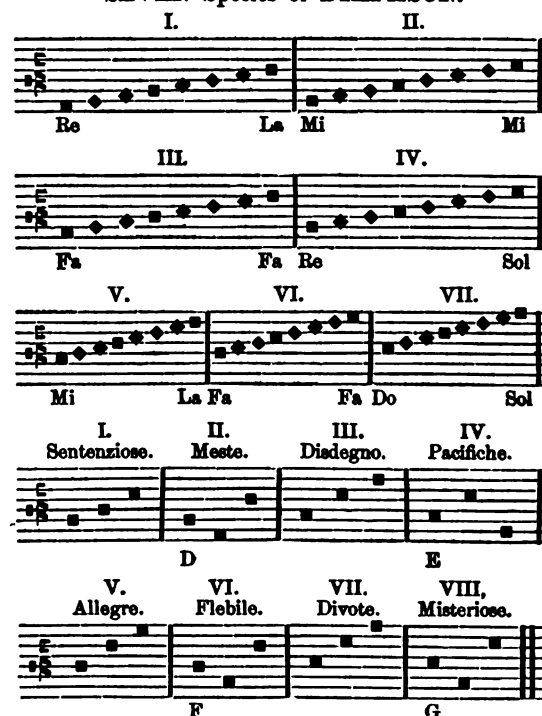
THREE Species of DIATESSARON.



FOUR Species of the DIAPENTE.



SEVEN Species of DIAPASON.



It now remains to show how the tones correspond with the seven species of diatessaron; and this will

† Hist. Mus. pag. 177.

most clearly appear from the description which Gafurius has given of them in his *Practica Musica* utriusque Cantus, lib. I. wherein he says,

'The first tone is formed of the first species of diapente, between D SOL RE and A LA MI RE, and the first species of diatessaron from the same A LA MI RE to D LA SOL RE in the acute, constituting the fourth species of diapason, D d.

'The second is formed of the same species of diapente and diatessaron; but so disposed as to form the first species of diapason, A a.

'The third is formed of the second species of diapente, between E LA MI, grave, and h MI; and the second species of diatessaron from the same h MI, to E LA MI, acute, constituting the fifth species of diapason, E e.

'The fourth is formed of the same species of diapente and diatessaron; but so disposed as to form the second species of diapason, h h.

'The fifth is formed of the third species of diapente, between F FA UT, grave, and C SOL FA UT; and the third species of diatessaron, from the same C SOL FA UT to F FA UT, acute; constituting the sixth species of diapason, F f.

'The sixth is formed of the same species of diapente and diatessaron; but so disposed as to form the third species of diapason, C c.

'The seventh is formed of the fourth species of diapente, between G SOL RE UT, grave, and D LA SOL RE; and the first species of diatessaron from the same D LA SOL RE, to G SOL RE UT, acute; constituting the seventh species of diapason, G g.

'The eighth is formed of the same species of diapente and diatessaron; but so disposed as to form the fourth species of diapason, D d, which is the characteristic of the first tone: but the dominant of the one being A, and that of the other G, there is an essential difference between them.'

Hence it appears, that the difference between the Authentic and Plagal modes, arises from the different division of the diapason in each; the Authentics being divided in harmonical, and the Plagals in arithmetical proportion. The nature of these is fully explained in the treatise *De Musica* of Boetius, lib. II. cap. xii.: and by Dr. Holder, in his treatise of the Natural Grounds and Principles of Harmony, chap. v.*

From the principles laid down by the latter of these writers,† it will follow, that taking the numbers 12, 9, 8, 6, to express the proportion of the diapason, and its component intervals, the diatessaron and diapente; when the division of the diapason is thus, 12, 9, 6, or A D a, giving to the diatessaron the lowest position, the proportion is arithmetical: When it is 12, 8, 6, or A E a, in which the diapente holds the lowest place, it is harmonical.‡

* See an extract from it, *supra*, chap. xxiv. † Vide Hold. pag. 86.

‡ Malcolm, in his *Treatise of Music*, pag. 162, says that the arithmetical division puts the 5th next the lesser extreme, and the harmonical next the greater, as in the numbers 6, 8, 9, 12, as they certainly do. Again he says, page 363, that the harmonical division places the 5th lowest, which is also true; hence it appears that he looks upon the lesser extreme to be the lowest position, but in this he errs: for if six parts give a, twelve must give the octave below it, *i. e.* A. Bontempi is also grossly erroneous in pages 70 and 173, et seq. of his history, and has made strange confusion, by giving the smaller number to the graves, and the larger to the acutes, and in the consequent misapplication of the adverbs *sotto* and *sopra*.

Having adjusted the number and limits of the tones, Gregory proceeded to the invention of a Cantus, such as he thought would be consistent with the gravity and dignity of the service to which it was to be applied. A plain unisonous kind of melody frequently inflected to the concords of its key, seemed to him the fittest for this purpose; and having prescribed a rule to himself, as well as to others, he proceeded to apply to the divine offices that kind of Cantilena which prevails in the Roman church even at this day; and which is known in Italy by the name of Canto Fermo, in France by that of Plain Chant, and in Germany and most other countries by that of the Cantus Gregorianus. Cardinal Bona gives this description of it:—'The cantus instituted by Saint Gregory was plain and unisonous, proceeding by certain limits and bounds of tones, which the musicians term Modes or Tropes, and define by the octonary number, according to the natural disposition of the diatonic genus.'

Considering that the right understanding of the ecclesiastical tones is essential to the regular performance of choral service, it is not to be wondered at, that almost every writer on music, who professes to treat the subject at large, has taken them under his consideration; and though it may seem, that after they were first established and promulgated through the church, they ceased to be an object worthy the attention of theorists in musical science, yet there is no assignable period in which it was not necessary to review them, and purge them from those errors which the levity and inattention of the singers were from time to time introducing; for, for near a century after Gregory's time, innovations of this kind were so frequent, that it seemed hardly possible to preserve the Cantus Gregorianus in any degree of purity; and, therefore, the court of Rome was continually troubled with applications from the princes of Europe, expressing their fears that the Cantus Gregorianus was in danger of being lost, and praying its interposition in order to its restoration.

A more particular account of these applications, and the success they met with, will shortly follow; they are mentioned in this place to shew that the Cantus Gregorianus was esteemed a matter of great importance in divine worship, and to account in some measure for the numerous tracts that are extant in the world concerning it.

CHAP. XXVIII.

In the earlier ages the treatises written with a view to preserve the integrity of the ecclesiastical tones, were composed in monasteries: Guido Aretinus, a Benedictine monk, in a tract entitled *Micrologus*, a very particular account whereof will hereafter be given, has bestowed three chapters on the explanation of the modes or tropes, which are no other than the eight ecclesiastic tones. Many other discourses on the same subject are also extant in manuscript; and in print they are innumerable.

Of manuscripts none can pretend to greater authority than the *Micrologus* of Guido Aretinus, the twelfth, thirteenth, and fourteenth chapters whereof

contain a general description of the eight ecclesiastical modes, tropes, or tones, but without any distinction of their respective finals and dominants. In a manuscript in the library of Baliol college, containing the *Micrologus* of Guido, and several other musical tracts, is a dialogue beginning with these words, 'Quid est Musica?' in which the tones are treated with a somewhat less degree of obscurity; but this also is defective in that it contains no Formula to ascertain the relation between the Dominant and the Final in each of them. But the manuscript of greatest value and curiosity, in respect of its copiousness and perspicuity, of any now extant, is one on vellum with the following title, 'Hunc Librum vocitatum Musi-cam Guidonis scripsit Dominus Johannes Wylde, quondam exempti Monasterii Sancta Crucis de Waltham Præcentor,' the property of Mr. West now president of the Royal Society, and which formerly belonged to Tallis, as appears by his handwriting on a blank leaf thereof.* In this book, of which a more particular account will be given hereafter, are contained a great number of discourses on the subject of music, composed by sundry persons, as namely, the above-mentioned Johannes Wylde,

Kendale, Johannes Torkesey, Thomas Walsyngham, Lyonell Power, Chilston, and others; and among these are several short tracts on the tones or tropes as they are called. The first in the book, which seems to have been not barely copied, but composed by Wylde, is on the subject of what he calls Guidonian music. It is divided into two parts, the one treating of Manual, *i. e.*, elementary music, from the figure of the left hand, which Guido is said to have made use of for explaining his system; and the other of Tonal music, containing the doctrine of the ecclesiastical tones.

In the thirteenth chapter of this second part of Wylde's tract it is said that all the tones are produced from the seven species of diapason; but as there are eight of the former, and only seven of the latter, the author first takes upon him to explain how the eighth tone was generated: he says that Ptolemy considered the seventh species as produced from the third, and thought that the fourth was also capable of producing another tone, which he added to the seven, making thereby an eighth: he adds, that he disposed one after another, the fifteen letters, which comprehended the bisdiapason; constituting A for the first note thereof, and P for the last; and having drawn seven semicircles, which pointed out seven species or tones, he added the eighth, extending from the middle letter H or H to the last letter P, which was the only eighth that wanted a semicircle; pointing out thereby the fourth species, which has its mediation in G, in which the eighth tone is terminated: and this, says he, Boetius asserted to be

the eighth mode or tone which Ptolemy superadded. The same author observes that though the species are Eight, yet the genera of tones are in truth but Four, each being divided into authentic and plagal; and that each genus is by some writers termed a *Maniera*, which appellation he rejects, as coming from the French. He says that no cantus in any of the tones can with propriety exceed the limits of a tenth; and so indeed do all the writers on this subject.†

In the same manuscript are several other tracts, one in particular composed by a certain monk of Sherborne, in metre, tending to explain the precepts of what was then called tonal music.

Many other manuscripts on this subject there are, which, by the assistance of the printed catalogues may be found; but as a comparison of the several definitions therein contained, might introduce a degree of confusion which no diligent enquirer would wish to encounter, it is safest to rely on those authors who have written since the invention of printing, and whose works have stood the test of ages.

Of these Gaffurius, as he is of the greatest antiquity, so is he of unquestionable authority. In his book intitled *Practica Musicæ utriusque Cantus*, printed in the year 1602, he has entered into a large discussion of the ecclesiastical tones, and has exhibited them severally in the following forms:—

TONE I.

Pri-mus to-nus sic in-ci-pit sic me-dia-tur et
sic fi-ni-tur. Se-cu-lo rum a men.
Euouæ. Euouæ.

TONE II.

Se-cundus to-nus sic in-ci-pit sic me-di-a-tur
et sic fi-ni-tur. Euouæ.

TONE III.

Ter-ti-us to-nus sic in-ci-pit sic me-di-a-tur
et sic fi-ni-tur. Euouæ. Euouæ.

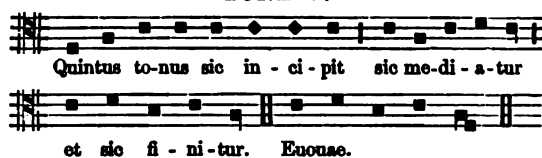
TONE IV.

Quar-tus to-nus sic in-ci-pit sic me-di-a-tur
et sic fi-ni-tur. Euouæ. Euouæ.

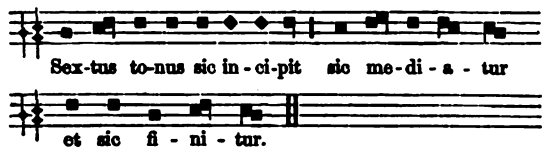
* This manuscript passed through the hands of Morley, and was of great use to him in the annotations on his Introduction: many years after his death it had for its owner Mr. Powle, speaker of the house of commons in the reign of King William; from him it came to Lord Somers; and after his decease to Sir Joseph Jekyll, at an auction of whose books it was bought by a country organist, Mr. West, and he in gratitude for some kindnesses done him, pressed the acceptance of it on its present worthy possessor. A copy of it was found in the library of Dr. Pepusch upon his decease, but it is from the original that this and the subsequent extracts from it are taken.

† This rule must be understood as referring only to that unisonous cantus which is used in the intonation of the psalms and other parts of the service, and not to that of the antiphons and hymns; for to these

TONE V.



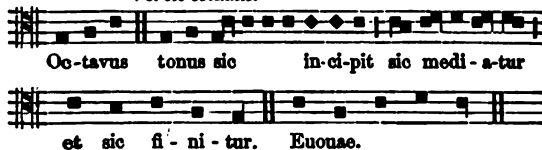
TONE VI.



TONE VII.

Vel sic.

TONE VIII.

Vel sic solennis.

a double, triple, and frequently a quadruple cantus is adapted; and in these the interior parts have often anomalous initials and finals; and in the extreme parts the ambit of the grave and acute sounds will often necessarily exceed the interval of a tenth.

The above characters exhibit the essential parts of each of the tones, that is to say, the beginning, the mediation, and the close, which is generally contained in the Euouae, a word, or rather a compages of letters, that requires but little explanation, being nothing more than the vowels contained in the words *Seculorum Amen*; and which whenever it occurs, as it does almost in every page of the antiphonary, is meant as a direction for singing those words to the notes of the Euouae.

From Gaffurius the tones have been continued down to this time, through all the books that have been written on the subject of music at large, in almost every country in Europe. Of those written professedly on the ecclesiastical tones, there are two that merit a particular attention, the one entitled *Armonia Gregoriana*, by Gerolamo Cantone, Master of the Novices, and vicar of the convent of St. Francis, at Turin, published in 1678, oblong quarto. The other has the title of *Il Canto Ecclesiastico*, the author D. Marzio Erculeo, printed at Modena in 1686, in small folio.

The first of these books contains the rudiments of singing, and the most important rules for the Canto Fermo, which for the most part are comprised in short memorial verses. The author has given a brief designation of the eight tones, but in his twenty-second chapter, entitled *De' Toni Misti*, he has assumed a licence which seems unwarranted by any precedent, at least in ancient practice, of combining together the first and second, the third and fourth, the fifth and sixth, and the seventh and eighth tones, and thereby exceeded the limits prescribed by the ancient writers, who all concur in restraining the canto fermo to the ambit of a tenth.

The latter of these books gives very ample directions for the singing of all the offices in the Roman service, and a representation of the tones in the following order:—

The first Tone has its final in D, and its Dominant in A, the fifth above its final, and is intonated by RE, LA.

I	{	RE, LA, FA, SOL, LA, LA, &c.	EUOUAE.
D		Final in D, dominant in F, a third above, intonated RE, FA.	
II	{	RE, FA, DO, RE, FA, &c.	EUOUAE.
		Final in E, dominant in C, a sixth above, intonated MI, FA.	
III	{	MI, FA, DO, RE, FA, FA, &c.	EUOUAE.
E		Final in E, dominant in A, a fourth above, intonated MI, LA.	
IV	{	MI, LA, RE, DO, RE, RE, &c.	EUOUAE.
		Final in F, dominant in C, a fifth above, intonated FA, FA.	
V	{	FA, FA, FA, RE, FA, FA, &c.	EUOUAE.
F		Final in F, dominant in A, a third above, intonated FA, LA.	
VI	{	FA, LA, FA, SOL, LA, LA, &c.	EUOUAE.

Final in G, dominant in D, a fifth above, intonated UT, SOL.

VII {

Final in G, dominant in C, a fourth above, intonated DO, FA.

VIII {

There is also another tone used in the Romish service, called by some of the writers on the Cantus Gregorianus, *Il Tuono Pellegrino*, i.e., the Wandering Tone; and by others *Tuono Misto*, or mixed; the manner in which it is intonated appears by the last stave above.

The writers on the Cantus Gregorianus have assigned to each of the eight ecclesiastical tones a peculiar character, supposing that each is calculated to excite different affections of the mind: this notion is to the last degree fanciful, as will appear from what Bontempi and Kircher severally say touching the power and efficacy of each.* *Erculeo* has distinguished them in the manner represented at the end of his scheme of the species of diatessaron, diapente, and diatessaron, herein before inserted.†

The consequence of these and other publications of the same import, was that the doctrine of the Cantus Gregorianus was rendered so perspicuous, and the forms of the tones so well established, that they became familiar even to children; but the stability they had acquired was not so great, but that about the beginning of the seventeenth century the levity and wantonness of the singers gave reason to fear the corruption of them.‡ It was about this time that the theatric style of music began to be formed, in the performance whereof *Castrati*, and others with flexible and extensive voices, were principally employed;

* Vide Bontempi, pag. 241. Kircher, Musurg. lib. VIII. pag. 142.

† Doctor Pepusch, in his short Introduction to Harmony, pag. 65, has remarked of the key E that it differs from all others, as in truth it does; for it has for its second a semitone, for which reason, and because of certain peculiarities in the modulation of it, and which render it very solemn, he says it is as it were appropriated to church-music, and called by the Italians *Tuono di Chiesa*.

This assertion of the Doctor may possibly be well grounded, but it is to be remarked that no such distinction occurs in the writings of Guido or Franchinus, or any of the other authors who have been consulted in the course of this work, for the purpose of explaining the Cantus Gregorianus, and the nature of the ecclesiastical tones.

‡ *Erculeo*, pag. 52.

these singers, for very obvious reasons, made use of divisions and all the other usual artifices to excite applause; and these were so grateful to the ears of the vulgar, that the singers employed in the choral service became infected with the like passion, and so mutilated and distorted the Cantus Gregorianus, that the dignity and simplicity of it was almost lost. This gave occasion in the year 1683 to an excellent French musician, Guillaume Gabriel Nivers, organist of the chapel of Lewis XIV. and master of music to his queen,§ to publish a book entitled *Dissertation sur le Chant Gregorien*. In the composition of this learned and judicious work, the author appears to have derived great assistance from the writings of Amalarius Fortunatus and St. Bernard, and from Cardinal Bona's book *De Rebus Liturgicis*, Durandus's *Rationale Divinorum Officiorum*, and, above all, from a more modern author, named Peytat, who wrote a history of the chapel of the king of France, a book abounding with a great variety of curious particulars.

Nivers succeeded so well in his endeavours to reform the cantus ecclesiasticus, that he was employed by the king to correct the Roman antiphonary, for the use of the churches in France; and the editions of that great volume since his time, bear testimony to the skill and industry which he must have exercised in so laborious and important a reformation. In short, he has not only reduced the tones to the standard of primitive purity, but has given such directions for the performance of the Cantus Gregorianus, and guarded so well against innovations in it, that there is very little reason to fear the loss of this precious relic of antiquity.

§ Nivers was also organist of the church of St. Sulpice, in Paris. He was the author of a book, entitled, *Traité de la Composition de Musique*, printed at Amsterdam, in octavo, 1697, and of some motets and pieces for the organ, which are also in print.

BOOK IV. CHAP. XXIX.

THE first eight chapters of Nivers's *Dissertation sur le Chant Gregorien*, contain a history of the primitive institution of it, and a vindication of the practice of antiphonal singing in general, from Socrates, Theodoret, and other ecclesiastical writers, with answers to the objections of such as either denied its authority or had contributed to the increase of those errors in the practice of it, which it is the purpose of his book to detect and reform.



In the ninth chapter the author enumerates the



several characters necessary in the notation of it, and describes them thus:—



'Twelve characters are sufficient for the plain-song; the first consists of four lines, upon which, and in the spaces between them, all the notes are situate; the fifth line, which certain innovators have added, is useless and embarrassing.

The second character is the key of C SOL UT FA or else by the method of the si; the key of C SOL UT made thus

'the first, the second, or the third, and never or very rarely on the fourth, because the key on the second line with a *b* soft commonly in *B*, has altogether the same effect as the same key on the fourth line without *b* soft; for it is always said the note on this fourth line is always sung *ut*, and the other notes consecutively in order. This is to be understood of the song, but not of the organ or other instruments.

'The third character is the key of *F UT FA*, made thus  or thus  which is generally situated on the second line, and sometime, but very rarely, upon the first.



'The fourth and fifth characters are the two notes, the long and the breve, made thus  , but as the number of characters necessary in it is one of the grand questions relating to the cantus, we defer speaking of it till in the next chapter, to confute the opinion of those who admit but one of them, namely, the long.*


'The sixth and seventh characters are the two bars; the great and the less, made thus   which are used to denote the place where all the choir together ought to take breath and make a little pause. These are the same in a song as stops are to words, wherefore we always at two points or a colon, and sometimes at commas, put a great bar to make the song complete, answering to a full stop. The principal use of the lesser bar is to give time for the whole choir together to draw breath, to the end that none of the singers may go on faster than the rest, and that the uniformity of the cantus may be preserved by all, and in all with an equal measure. At the end of every piece there are put two great bars to mark the end of the song; these bars are the most efficacious contrivance that can be thought on to remedy all the cacophonies and contrarieties in the voices of the singers, who, without them, could not guess when to rest; but the abuse of these bars is become almost general, for the markers or writers of notes and the printers imagine there must be one at every word; so that if there are four, five, six, or seven monosyllables following one another, they put as many bars as there are notes, as if all the notes were not of themselves as well separated, without bars, as the words are. St. Bernard speaks of this confusion

* Nivers, in the subsequent chapter, undertakes the discussion of a question which it seems had subsisted for a long time, namely, how many characters or marks of time were necessary in the cantus ecclesiasticus? He contends that not more than two, namely, the long and the breve, are admissible into it; for this he cites the acts of the council of Rheims in 1564, in which it was decreed that the cantus should contain but one note on a syllable, and that the quantities of each should be observed in the notation. He seems to think that this was the very reformation intended by the council of Trent, in that decree of it which is mentioned by Fathes Paul, pag. 559. of his history, to have been made in 1562, against over-curious and wanton singing. He also cites Rabanus Maurus to prove that all clerks should perfectly understand the nature of the accents, and accommodate their notation to it. Farther he asserts, on the authority of Radulphus, that in the gradual of the blessed Gregory at Rome there are but few notes, and that there is reason to believe that many characters in those of an hundred years after him have no warrant for their admission.



In the course of this disquisition Nivers seems not to be in the least aware of a reformation of the cantus ecclesiasticus made by Palestrina and Francesco Suriano, about the year 1580, which consisted in the reduction of the characters to three, namely, the long, the breve, and the semibreve; and is expressly mentioned by Marzio Erculeo, in his Discourse on the Cantus Ecclesiasticus above-cited.



'in these words: "What sort of liberty is this which introduces the confusion of uncertainty, &c." And in effect this confusion of bars is of no service, since all the notes are of themselves as distinct as the words; and all these bars are not only useless and embarrassing, but they yet (which is remarkable) destroy the benefit of their institution, because the singers, no longer knowing where to repose themselves, some stop while others advance, which occasions the greatest disorders in the song; and the excess of bars puts the song again into its former abuse, when it had no bars, which we see in the more ancient manuscripts.

'The eighth character is the guidon, made upon the line, or in the space thus  or thus  to mark where the following note will be situated in the other line.

'The ninth character is the bemol, made thus in a space, but rarely on a line  which is always marked in *B*, and very rarely in *E*.

'The tenth is the point between two short notes the use of it is to augment the precedent one, and diminish that following it, to observe a certain regulated measure, for example, that of two times. Sometimes the point is also put between a long note and a short one; and in such case it only augments the long note with the half of its own value, so that the point and the following breve considered together complete the just measure of a long note.

'The eleventh character is the bond or joining, made thus , or thus , which serves to tie two or more notes, or long ones and breves on one and the same syllable, to keep the regulated measure.

'The last character is the diesis, made thus , or thus ; the use of it is to soften the following note, or that above or under which it is placed; the diesies are rarely marked in the plain-song, because the voice itself naturally leads to it.†

† This is the form of the guidon in ancient missals, and other books written or printed with musical notes: it is an indication of the first note in a succeeding staff, and is that note in a smaller character. This kind of guidon is now disused, and has given place to that other above described.

‡ The following directions of Nivers contain the principal rules to be observed in the performance of the cantus ecclesiasticus:—

To begin to sing or intonate an anthem, or any other part of the office whatsoever, the rule is to attend particularly to the dominant of the choir, which ought to be regulated according to the voices which compose it; for it would be acting quite contrary to nature and reason to pretend to establish the same dominant for the low, the middle, and the highest voices.

To arrive at a perfect knowledge of these things, it ought to be known that the whole song consists in eight modes or tones, which may be reduced to four by their finals, and even to two, by only the difference of the greater third and the lesser third.

The uneven tones, which are only so termed, as being distinguished by the odd numbers 1, 3, 5, 7, are called authentics or principals: the others are named plagals or dependents, because they have one and the same final each with their authentic, and thus the first and second have one and the same final, so the third and fourth, the fifth and sixth, the seventh and eighth; all their difference consists only in the extent, which in the authentics is above, and in the plagals below.

Every tone has two essential chords, called the final and the dominant, upon which all sorts of songs turn and are founded. The final is that by which the tone ought for the most part to begin, but always to end. The dominant is that which rules or prevails the oftentimes in the song, and upon which the tenor of the psalms, orations, and all that is to be sung straight forward, or nearly straight forward, is made. Wherefore this dominant ought to be a little higher than the middle of the natural voice, and not lower, because that in all the tones the extent of the notes is greater below than above the dominant; but it is not a small difficulty to take it just and in a good pitch.

For the common and ordinary voices they put the dominant of the choir in *A* of the organ; I mean the organs which have the tone of the

Having thus explained the characters, Nivers, in his twelfth book, proceeds to a discrimination of the tones by the finals and dominants of each in their respective order, in the words following:—

‘The first has its final in D, and its dominant in ‘A, the fifth to its final; RE LA.’

‘The second has its final in D, and its dominant in ‘F, a third to its final; RE FA.’

‘The third has its final in E, and its dominant in ‘C, a sixth to its final; MI UT.’*

‘The fourth has its final in E, and its dominant in ‘A, a fourth to its final; MI LA.’

‘The fifth has its final in F, and its dominant in ‘C, a fifth to its final; UT SOL, or else FA UT with B

‘h, not b.’

‘The sixth has its final in F, and its dominant in ‘A, a third to its final; UT MI, or else FA LA, with B

‘h, not b.’

‘The seventh has its final in G, and its dominant in ‘in A, a fifth to its final; SOL RE.’

‘The eighth has its final in G, and its dominant in ‘C, a fourth to its final; SOL UT.’

The dissertation of Nivers contains also *Formulæ Cantus Ordinarii Officii Divini*. These he has given in Latin, together with the musical notes: they contain directions for singing the oraisons and responses, and for reading the prophets, the epistles, and gospels, and for the intonation of the psalms. There are also several litanies and antiphons, and that famous lamentation of the Virgin, in monkish rhyme:—

Stabat mater dolorosa
Juxta crucem lachrymosa.

The formula of the tones intitled *Tabula tonorum*, is also given in musical characters, and contains the following examples:—

Intonatio, Tractus Notarum, Mediatio, Tractus Terminatio.

I.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

king's chapel, which all the famous organs of Paris and elsewhere have, 'wherefore this tone is called the tone of the chapel, to distinguish it from the tone of the king's chamber, which is a semitone higher, and so commonly are, or ought to be, the organs in nunneries; the nuns having generally an extent of voice higher by an octave than the common voices of men.

*For the low voices they put the dominant in G of the organ.

*For the high voices they put the dominant in B of the organ.

*For the voices of religious women they put the dominant in C, or even in D of the organ, according to the quality of the voices.


*The first thing therefore that ought to be known is the dominant of the choir, which is only a general sound, or tone if you will, and not fixed to any note or degree, that is to any rule or interval on which this dominant can be placed.

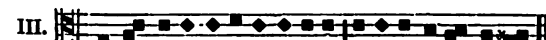
*The second thing to be observed is the mode or tone of the anthem which is to be sung, and to regulate the dominant of the anthem to the union of the dominant of the choir which performs it, and then to proceed from this dominant regularly, and pass through all the degrees as far as the note by which the anthem ought to begin; for example, if I would intonate the first anthem of the Feast of the Holy Sacrament, "Sacerdos in æternum," I sing slowly the dominant of this anthem, which is LA, to the union of the dominant of the choir, and descend by degrees to the final of the anthem, by which it begins, singing LA, SOL, FA, MI, RE, to find the just tone of the first note of the said anthem, "Sacerdos in æternum," and after the same manner in other anthems and tones. But one should not be ignorant of the essential chords of every tone.

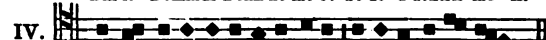
It should seem by these several tracts of Erculeo and Nivers, and other authors who might be named, that the doctrine of the tones is now so well established, that there is not the least reason to fear any corruption of them. In England the little book entitled *A pious Association*, published for the instruction of persons of the Romish persuasion in the true church plain-song, contains a formula of the eight tones, exactly corresponding with that of Nivers above given; and it farther appears, that in the seminaries throughout Italy it is taught to children in a way that admits of no variation. In short, its principles seem to be as well understood as those of arithmetic, or any other mathematical science.

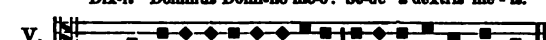
*According to the French method of solmization; but Erculeo makes it LA.

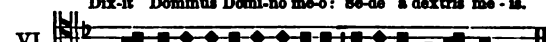
Intonatio, Tractus Notarum, Mediatio, Tractus Terminatio.

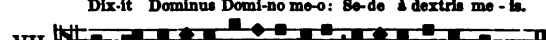
II.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

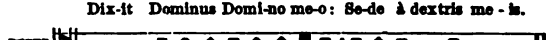
III.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

IV.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

V.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

VI.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

VII.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

VIII.  Dix-it Dominus Domi-no me-o: Se-de à dextris me-is.

To facilitate the remembrance of the formula of each of the tones, and particularly to impress upon the minds of children the finals and dominants that characterise them, memorial verses have been composed, of which the following are a specimen:—

Primus habet tonus F SOL LA, sextus et idem:

UT RE FA octavus: sit tertius, atque secundus:

LA SOL LA quartus: dant UT MI SOL tibi quintum:

Septimus at tonus FA MI FA SOL tibi monstrat.

Septimus et sextus, dant FA MI RE MI quoque primus.

Quintus et octavus, dant FA SOL FA sicque secundus.

SOL FA MI RE FA tertius, RE UT RE MI requie quartus.

Primus cum quarto dant A LA MI RE, quoque sextus

E FA UT secundus: C SOL FA UT tertius tibi notat,

Cum eo quintus, octavusque signat ibidem:

Septimus in D LA SOL RE suum ponit EVOLVÆ.

By the foregoing deduction of the nature of the Cantus Gregorianus, nothing more is intended than to explain its original form, for it will be observed that none of the authors above-cited presume to make any additions to, or amendments of it; on the contrary they labour to represent it in its purity, and to preserve it from corruption. This was evidently the design of Nivers; and his book, which is of the controversial kind, is calculated to correct certain abuses in the service that arose from the wantonness and levity of the singers, and were peculiar to his time; but the Cantus Gregorianus suffered greatly from corruptions that were the effect of ignorance, and which took place within a century after its institution; and these corruptions, their nature, and causes, and the methods taken to remove them by the several princes of Europe, especially those of Germany, France, and England, make a very considerable part in the History of Music, and therefore require to be particularly mentioned; and if the foregoing digression may seem to deviate from the rule which chronology prescribes in the relation of events, let it be remembered that in this case a strict adherence to it would have been absurd; for who can understand a relation of the several corruptions of the Cantus Gregorianus, who is not first made sensible of its

nature and application ; in short, who has not a clear conception of the thing itself, in its original state of purity and perfection.

That the Cantus Gregorianus became corrupt in a short time after its institution, may be gathered from the ecclesiastical and other writers, from the seventh century downwards. Saint Bernard, in a preface to the antiphony of the Cisterians, has enumerated many abuses, disorders, and irregularities which had crept into the church-service before his time, and this even at Rome itself : he speaks of the singers of his time as ignorant and obstinate to a degree that is scarce to be credited ; for he represents them as confounding the rules, and preferring error to truth : and referring to an Antiphon, ' Nos qui vivimus,' the proper termination whereof is in D, he adds, that those unjust prevaricators, the singers of his time, would terminate it in G, and assert with an oath or wager, that it was of the eighth tone.

Sir Henry Spelman (whom Gerard Vossius has followed, in an account given by him of this matter)* upon the authority of an anonymous commentator on Hugo Reutlingensis, relates that the Cantus Gregorianus was very much corrupted by the Germans. The words of the author thus referred to are, ' Certain Germans, and particularly the clergy of the order of St. Benedict, who had learned perfectly and by heart the musical cantus, not only theoretically, but also by practice and exercise, leaving out the keys and lines which are required in the musical Neuma,† note or character, began to note them down simply in their books ; and after that, their successors sang in the same manner, and taught their scholars, not theoretically, but by frequent practice and long exercise ; which cantus thus learned by practice, became various in different places, wherefore it was then termed practice, usus,‡ and not music. In this cantus however the scholars afterwards began to differ in many things from their masters, and the masters from their scholars ; from which difference, and the ignorance of the theory, the practice was said to be confused, which confused practice being despised, almost all the Germans, who were hitherto miserably seduced by that cantus, are returned to the true art.'

These corruptions, according to the author above-cited, seem to have been peculiar to Germany ; but there were others of an earlier date which prevailed in France and also in Britain, for the latter of which countries Gregory seems to have entertained such a degree of affection, as makes it highly probable that the inhabitants of it were some of the first people to whom the knowledge of the Cantus Gregorianus was communicated, and that they became Christians and singers at one and the same period.

* Voce Frigidore. Sed vide Ger. Voss. De Scientiis Mathematicis, cap. xxi. § 12.

† This word, which Sir Henry Spelman has elsewhere said is synonymous with the noun Note, has two significations ; that which Gaffurius has given of it is its primitive and true one ; and he says it is an aggregation of as many sounds or notes as may be conveniently uttered in one single respiration. Vide Spelman's Gloss. voce NEUMA ; and Gaffurius, Pract. Mus. lib. I. cap. viii. Probably it is derived from the Greek Πνευμα.

‡ For which reason, the terms Salisbury use, Hereford use, the use of Bangor, York, Lincoln, are taken to describe the ritual of those several cathedrals in the preface to the book of Common Prayer.

The history of the conversion of the Saxon inhabitants of this island to christianity in the year 585, is related by all our historians, particularly by Bede, whose account of it, as exhibiting a very natural representation of the simplicity of manners which then prevailed, is here inserted :—

' It is reported that merchants arriving at Rome, when on a certain day many things were to be sold in the market-place, abundance of people resorted thither to buy, and Gregory himself with the rest, where, among other things, boys were set to sale for slaves, their bodies white, their countenance beautiful, and their hair very fine : having viewed them, he asked as is said, from what country or nation they were brought, and was told from the island of Britain, whose inhabitants were of such a presence.§ He again enquired whether those islanders were Christians, or still involved in the errors of paganism, and was informed that they were pagans. Then fetching deep sighs from the bottom of his heart, " Alas ! what pity, said he, that the author of darkness is possessed of men of such fair countenances, and that being remarkable for such graceful aspects, their minds should be void of inward grace." He therefore again asked what was the name of that nation, and was answered, that they were called Angles : " Right, said he, for they have an angelical face, and it becomes such to be co-heirs with the angels in heaven. What is the name," proceeded he, " of the province from which they are brought ? " ' It was replied, that the natives of that province were called Deiri,|| " Truly Deiri," said he, withdrawn from wrath and called to the mercy of Christ. How is the king of that province called ? " They told him his name was Elle ; and he, alluding to the name, said, " Hallelujah, the praise of God the creator must be sung in those parts." Then repairing to the bishop of the Roman and apostolical see (for he was not himself then made pope) he entreated him to send some ministers of the word into Britain, to the nation of the English, by whom it might be converted to Christ.' ¶

The above relation is very characteristic of the humanity and simplicity of the reverend father. Fuller, who labours hard to make all mankind as merry as himself, thinks that in his ready application of the answers of the merchants to his purpose, his wit kept pace with his benevolence, and having a mind to try whether he could not be as witty as the father, he has given the whole conversation a dramatic turn, by putting it into the form of a dialogue.**

The sight of these children, and the knowledge which Gregory thereby acquired of this country and its inhabitants, were the motives for sending Augustine the monk hither, with whom, as we are expressly told by Johannes Diaconus, who wrote the Life of St. Gregory, singers were also sent (Augustine then going to Britain), and afterwards

§ William Thorn, a monk, of St. Augustine's Canterbury, says there were three of these boys : ' Vidit in foro Romano tres pueros Anglicos lactei candoris.' Decem Scriptores, pag. 1757.

|| i. e. of Deirham, or Durham.

¶ Bed. Hist. Ecclesiast. lib. II. cap. i.

** Church Hist. of Britain, Cent. VI. book II.

dispersed through the west, who thoroughly instructed the barbarians in the Roman institution. The same author proceeds to relate that after the death of these men* the modulation of the western churches became very corrupt, and continued so till pope Vitalianus the First, who introduced the organ into the choral service, sent John, a famous Roman singer, together with Theodore, afterwards archbishop of Canterbury, by the way of France into Britain, who corrected the abuses that had crept into the church-service of this, as it should seem, favourite people.

Farther he says, that afterwards the Gregorian chant became again corrupt, particularly in France, for which reason Charlemagne sent two clerks to

* The names of the singers who came into Britain with Augustine are no where particularly mentioned. We learn however from Bede that the church song was at first only known in Kent; that afterwards, that is to say about the year 630, when Paulinus became bishop of the Northumbrians, a deacon of his, named James, had rendered himself very famous for his skill in the church song; and that Wilfrid, a succeeding bishop of the same see, about the year 664 invited out of Kent Eddi, surnamed Stephen, for the purpose of teaching the same in the several churches of the Northumbrians. Farther, Bede gives a particular account of John the singer above-mentioned, whom he styles archchanter or precentor of the church of the holy apostle Peter, and abbot of the monastery of St. Martin, and elsewhere singer of the apostolic see: he says he was sent into Britain by pope Agatho, that he might teach the method of singing throughout the year, as it was practised at St. Peter's at Rome; and that he settled in a monastery which Ecgfrid king of the Northumbrians had founded at the mouth of the river Wye. He farther says that John did as he had been commanded by the pope, teaching the singers of this monastery the order and manner of singing and reading aloud, and committing to writing all that was required throughout the whole course of the year for celebrating festivals, all which were in Bede's time observed in that monastery, and transcribed by many others elsewhere; he says farther that the said John did not only teach the brethren of that monastery, but that such as had skill in singing resorted from almost all the monasteries of the same province to hear him.

The reverend Mr. Johnson, late of Cranbrook in Kent, has given a summary of this relation, with his own sentiments thereon, in a book which hardly any one now looks into, but which abounds with a great variety of curious learning, his *Collection of Ecclesiastical Laws*; in the general preface to which he says, upon the authority of Bede, that pope Agatho, above eighty years after Augustine's coming over, sent John, the precentor of St. Peter's church in Rome, to instruct the monks of Wirmuth in the annual course of singing; and that he did accordingly teach them the order and rite of singing and reading in the celebration of feasts through the circle of the whole year, and that he wrote down and left behind him whatever was requisite to this purpose. And that the sum of what he taught them consisted in new tunes or modes of music, some variations of habit, gesture, and perhaps of the series of performing religious offices according as the fashions had been altered at Rome since Augustine's coming hither—that he taught them viva voce, and what he wrote down concerned only the celebration of the festivals—that John was sent to one monastery only, and is not said to have taught any but the Northumbrians.—That upon Theodore's first coming to Canterbury, which was ten or twelve years before this, the Roman way of singing was well known in Kent, and then began to be taught in other churches—that Wilfrid soon after invited Eddi, otherwise called Stephen, out of Kent into the North, to teach his practice there. But thirty-five years before Theodore's arrival, James, the Kentish deacon, had been left at York by Paulinus when he retired to Rochester, on purpose to teach them the way of singing used by the Romans and the Kentish. The same author adds as a conjecture of his own, that it is probable that neither of these Kentish singing-masters went farther than Hexham, however not to Wirmuth.

The same Collection contains a decree of the Roman council, which as it relates to music, and was made to reform an abuse of it that prevailed about this time, it may not be improper here to mention. By this act it is decreed that bishops, and all whosever that profess the religious life of the ecclesiastical order, do not use weapons, nor keep musicians of the female sex, nor any musical concerts whatsoever, nor do allow of any buffoneries or plays in their presence.

Of James, the deacon of Paulinus above-mentioned, he says that he lived to his [Bede's] time. If so, and considering that Paulinus was bishop of Northumbria, in which province Bede's monastery was situate, it is more than probable that Bede and James were intimately acquainted.

Bede also mentions as living in the time of Theodore, Putta, a man of great simplicity in his manners, extremely well versed in ecclesiastical discipline, and remarkably skillful in church-music, and who, on account of these his excellencies, was preferred to the see of Rochester. Mention will be made of this person hereafter, in the interim it is to be observed, that the testimony of Bede is of great weight in all matters that relate to church discipline, and that hardly any man of his time was better acquainted with the music of the church than himself: in a summary of his own life, at the end of his *Ecclesiastical History*, he mentions his being a priest of the monastery of Wirmouth, the very monastery where John the precentor settled upon his arrival in Britain; and that he there applied himself to the meditation of scripture, the observance of regular discipline, and the daily care of singing in the church; and that he always delighted in learning, teaching, and writing.

Rome with a request to Adrian, the then pope, that they might be instructed in the rudiments of the genuine Roman song; these brought back the metropolis of Metz to its original purity of singing, and that city communicated its example to all France. The same author adds that the death of these two men produced the same effect, though in a less degree, in France, as that of the others had done in Britain; wherefore the king wrote again to Adrian, who sent him two singers, who found that the church of Metz had deviated a little from the true rule of singing, but the other churches a great deal. The same author adds, that this diversity was remarkable in his time, for that the rest of the French and all the German churches were then as much inferior in the purity of their choral service to that of Metz, as the latter were to the Roman; but for the present he says these men reduced the church of Metz to order.

Monsieur Nivers, from Peytat, a modern writer, and a countryman of his, who it seems wrote an ecclesiastical history of the chapel of the king of France, cites the following passage:—

Pope Stephen II. being constrained to seek to Pepin king of France for protection of the holy see against the Lombards, arrived in that kingdom so soon after Pepin's ascent to the throne, as to perform the ceremony of his consecration in the abbey-church of St. Denys. From Rome the pope had brought with him chaplains and singers, who first made it their business to instruct the choir of St. Denys in the Roman office; and afterwards, for the pope made a considerable stay in France, assisted in communicating the knowledge of it to the other churches in that kingdom. At that time the chapel of Pepin consisted of the very flower of the clergy, and, with the assistance of the Romans, not only the plain-chant but the use of instruments was spread throughout the realm. This reformation it is true did not last long, for upon the death of Pepin, his son Charlemagne found the choral service in as great disorder as ever, which, says the monk of St. Oibard of Angoulesme, was the reason that induced this emperor to apply to Adrian for assistance from Rome.

CHAP. XXX.

THE account given of this matter by another ancient writer, a monk of St. Gal, is that the pope sent to France, at the request of the emperor Charlemagne, twelve excellent singers, answering to the number of the apostles, whose instructions were to reform the music of the French churches, and regulate the service, so as that there might be an uniformity in this respect throughout the kingdom; but that these men, jealous of the glory of France, in their way thither plotted to corrupt and diversify the plain-chant in such a manner as to increase the confusion in which it was involved, and thereby render the people for ever incapable of performing it correctly. As soon as they arrived in France where they were received with great honour, they

were, by order of the emperor, dispersed to different parts of the kingdom; but how well they answered the purpose of sending for them, the event soon showed; for every man teaching a different chant for the true one of St. Gregory, which they were sent for to restore to its original purity and propagate, the confusion was greater than ever.*

The emperor it seems was too well skilled in music for this deceit to pass upon him unnoticed: he had, in the life-time of his father, heard the true Roman chant at Treves, where he had passed the Christmas, and at Metz also he had been present when it was sung in its perfection; but after the arrival of these people, spending part of that festival at Paris and the rest at Tours, he was surprised to hear a melody different from that which before he had so much admired; his disappointment excited in him a curiosity to hear the service as it was performed in the other churches; but among the singers he found such a disagreement, that he complained to the pope of the behaviour of those whom he had sent; the pope recalled them to Rome, and condemned some of them to banishment, and the rest to perpetual imprisonment. After this it was that Adrian sent to France the two singers who reformed the French church-music, as above is related.

None of the historians who relate the transactions of this period, except Baronius, assign the reason of the emperor's application to pope Adrian for assistance in the reformation of choral music in his kingdom of France. It seems that that pope had established the use of the *Cantus Gregorianus* by the decree of a council, which he had summoned for that purpose, and that his zeal to render it universal was the effect of a miracle, which, if we may believe the writers of those times, had then lately been wrought in its favour. It is said, that after the death of Gregory the method of singing instituted by him began to decline, and the Ambrosian cantus to revive. Adrian had entertained an opinion of the superior excellence of the former, and was determined to establish the use of it throughout the church; for this purpose he summoned a council above-mentioned, who being unable to determine the preference between the one and the other of the offices, referred the decision of the matter to God, and a miracle announced that the preference was due to the Gregorian office.

Durandus has given a very circumstantial relation of this extraordinary event in the following words:—†

'We read in the life of St. Eugenius that till his time the Ambrosian office was more used by the church than the Gregorian: pope Adrian summoned a council, by which it was decreed that the Gregorian ought to be universally observed. Moreover St. Eugenius coming to a certain council, summoned for this purpose, and finding that it had been already dissolved three days, he persuaded the lord pope to recall all the prelates who had been present thereat. The council, therefore, being reassembled, it was the unanimous opinion of all the fathers, that the Am-

brosian and Gregorian missals should be laid upon the altar of St. Peter, the apostle, secured by the seals of most of the bishops, and the doors of the church shut, and that all persons present should spend the night in prayer that God would show by some sign which of these missals he chose to have used by the church; and this was done in every respect. Accordingly, in the morning, when they entered the church they found the Gregorian missal torn to pieces, and scattered here and there, but they found the Ambrosian only open upon the altar, in the same place where it had been laid. By which sign they were taught from heaven that the Gregorian office ought to be dispersed throughout the whole world, and that the Ambrosian should be observed only in that church in which it was first instituted. And this regulation prevails to the present day; for in the time of the emperor Charles, the Ambrosian office was very much laid aside, and the Gregorian, by the imperial authority, was brought into common use. Ambrose instituted many things according to the ritual of the Greeks.' Gulielm. Durandus *Rationale Divinorum Officiorum*. Lugd. 1574, lib. II. cap. ii. numb. 5.

The historians of the time take notice, that in the year 787 a violent contest arose between the Roman and French singers, concerning the true method of singing divine service, which was carried on with so much heat and bitterness, that neither side could be made to yield. At length, the matter was brought before the emperor; who, after hearing the reasons and arguments of each party, determined in favour of the Roman practice, by declaring, that the French singers had corrupted the *Cantus Gregorianus*. Baronius has related the transaction at length in these words:—

'In the ancient chronicle of Charles king of France, which Pitheous published, these things then done at Rome are recorded. The most pious king Charles returned, and celebrated Easter at Rome with the apostolical lord. Behold a contention arose, during the time of the paschal feast, between the Roman and French singers: the French said that they sang better and more gracefully than the Romans; the Romans said they performed the ecclesiastical cantus more learnedly, as they had been taught by St. Gregory, the pope; and that the French sang corruptly, and debased and ruined the true cantilena. This contention came before the emperor Charles; and the Gauls relying on his favour, violently exclaimed against the Roman singers; and the Romans, upon the authority of their great learning, affirmed that the Gauls were fools and rustics, and as unlearned as brute beasts, and preferred the learning of St. Gregory to their rusticity: and the altercation ceasing on neither side, the emperor said to his singers, "Tell me plainly, which is the purer, and which the better, the living fountain, or its rivulets running at a distance." They all, with one voice, answered the fountain; as the head and origin is the purer, and the rivulets, the farther they depart from the fountain, are by so much the more muddy, foul, and corrupted with impurities. "Then, said

* Vid. Niv. sur le Chant. Greg. chap. iv. pag. 33.

† Afterwards pope: the second of that name. Du Pin, Hist. Eccl. vol. III. pag. 6.

"the emperor, return ye to the fountain of St. Gregory, for ye have manifestly corrupted the ecclesiastical cantus."

The emperor, therefore, soon after desired singers of pope Adrian, who might reform the French singing; and he sent to him Theodore and Benedict, two of the most learned singers of the Roman church, who had been taught by St. Gregory; and he sent by them the antiphonary of St. Gregory, which he had marked with the Roman note. The emperor returning into France, sent a singer of the city of Metz, with orders that the masters of schools throughout all the provinces of France should deliver their antiphonaries to them to be corrected, and that they should learn to sing of them. Upon this, the antiphonaries of the French were corrected, which every one had corrupted, by adding or diminishing according to his own fancy, and all the singers of France learned the Roman note; except that the French, who, with their voices, which are naturally barbarous, could not perfectly express the delicate or tremulous, or divided sounds, in music, but broke the sounds in their throats, rather than expressed them: but the greatest singing school was that in the city of Metz; and as much as the Roman school excels the Metensian in the practice of singing, by so much does the Metensian excel the other schools of France. In like manner, the aforesaid Roman singers instructed the singers of the French in the art of instrumental music: and the emperor Charles again brought with him from Rome into France, masters of grammar and mathematics, and ordered the study of letters to be every where pursued; for before his time, there was no attention paid to the liberal arts in Gaul. This account is given of these affairs in that chronicle. Moreover, there is an ordinance of Charles the Great himself concerning the performance of the Roman music in Gaul, in these words: "That the monks fully and regularly perform the Roman singing in the nocturnal stated service, according to what our father king Pepin, of blessed memory, decreed should be done, when he introduced the Gallican singing for the sake of unanimity in the Apostolic See, and the peaceful concord of the Holy Church."*

The zeal which this prince discovered through the course of a long reign, in favour of the church, and for the re-establishment of ecclesiastical discipline, has procured him a place among those ecclesiastical writers enumerated in Du Pin's voluminous history. It was the good fortune of this emperor to have in his service a secretary, named Eginhart, a man not more eminent for his knowledge of the world, than celebrated for his skill in the literature of those times. To him we are indebted for a life of this great prince, one of the most curious and entertaining works of the kind at this day extant: in this are recorded, not only the great events of Charlemagne's reign, but the particulars of his life and character, a very exact description of his person, his studies, his recreations, and, in short, all that can gratify curiosity, or tend to exhibit a lively portrait of a great man. Not to

enter into a minute detail of his wars and negotiations, or the other important transactions during his government, let this short sketch of his personal and mental endowments, and his labours to restore the service of the church to its original purity, suffice, as having a more immediate relation to the subject of this work.

CHARLEMAGNE was born in the year of Christ 769, at Ingelheim, a town in the neighbourhood of the city of Liege, in Germany. His father was Pepin, king of France, surnamed the Little, by reason of the lowness of his stature; who, upon his decease, made a partition of his dominions between his two sons, bequeathing to Charlemagne, the elder, France, Burgundy, and Aquitaine, and to Carloman, Austria, Soissons, and other territories; but Carloman surviving his father a very short time, Charlemagne became the heir of all his dominions, and at length emperor of the West.

The stature and person of Charlemagne are very particularly taken notice of and described by the writers of his history, by which it appears, that he was as much above the ordinary size of men, as his father Pepin was below it. Turpin, the archbishop of Rheims, relates, that he was eight feet high, that his face was a span and an half long, and his forehead one foot in breadth, and that his body and limbs were well proportioned. He had a great propensity to learning, having had some of the most celebrated scholars of the age in which he was born, for his tutors; and it is to the honour of this country that Alcuin, an Englishman, and a disciple of Bede, surnamed the Venerable, was his instructor in rhetoric, logic, astronomy, and the other liberal sciences; † notwithstanding which, there is a very curious particular recorded of him, namely, that he never could, though he took infinite pains for the purpose, acquire the manual art of writing or delineating the letters of the alphabet; ‡ so that whatever books or collections are ascribed to him, must be supposed either to have been dictated by him, or written by others under his immediate inspection: indeed, the works attributed to him are of such a kind as necessarily to imply the assistance of others, and that they are to be deemed his in no other sense than as they received his sanction or approbation; for they are chiefly either capitularies, as they are called, relating to ecclesiastical matters, as the government of the church, the order of divine service, the observance of rites and ceremonies, and the regulation of the several orders of the clergy; or they are letters to the several princes and popes, his contemporaries, and to bishops, abbots, and other ecclesiastical persons. § Two works in particular are ascribed to him, and the opinion that they were of his composition is generally acquiesced in; these are letters written in his name to Elipandus, bishop of

† Alcuin was well versed in the liberal sciences, particularly in music, as appears by a tract of his on the use of the Psalms, and by the preface to Cassiodorus De septem Disciplinis, first printed in Garetius's edition of that author, and which is expressly said by Du Pin, Fabricius, and others, to have been written by Alcuin. It was at the instance of Alcuin that Charlemagne, in the year 790, founded the university of Paris.

‡ Tentabat et scribere, tabulasque et codicillos ad hoc in lectulo sub cervicalibus circumferre solebat, et cum vacuum tempus esset, manum effingendis literis assuefacere. Sed parum prospere successit labor preposterus ac sero inchoatus. Eginhart De Vita Caroli Magni, cap. xxv. edit. Bessell.

§ Du Pin, Nov. Biblioth. de Auteurs Ecclesiast. Sæc. VIII.

* Baron. Annal. Ecclesiast. tom. IX. pag 415.

Toledo, and other bishops of Spain, on certain points of doctrine; and four books against the worship of images: and it is with a view to these, and some other compositions that passed for his, that Sigebert, Du Pin, and others, give him a place among the ecclesiastical writers of the eighth century.

The zeal of this emperor to introduce the Cantus Gregorianus into his dominions, and to preserve it in a state of purity, has drawn upon him an imputation of severity; and upon the authority of that single passage in the *Rationale* of Durandus, above-cited, he is censured as having forced it upon the French with great cruelty. But there is nothing either in his relation of the supposed miracle in its favour, or in that of Baronius touching the contention at Rome, which will warrant this charge; for in that dispute at which Eugenius was present, it does not appear that he at all intermeddled; and in the other, the question which he put to his own clergy, is manifestly an appeal to reason, and no way indicates a disposition to coercive measures. 'Tell me,' said the emperor, 'which is the purer, the living fountain, or 'its rivulets?' They answered, 'the former.' Then said the emperor, 'Return ye to the fountain of St. Gregory; for in the rivulets the ecclesiastical cantus 'is corrupted.' Eginhart has mentioned in general that Charlemagne laboured to rectify the disorderly manner of singing in the church; * but he mentions no circumstances of bloodshed, or cruelty, to enforce a reformation: and the fact is, that several churches in his dominions, particularly those of Milan and Corbetta, were suffered to retain either the Ambrosian or a worse use, notwithstanding his wishes and efforts to the contrary.† In short, it seems that his behaviour upon this occasion was that of a wise man, or, at least, of one whose zeal had a sufficient alloy of discretion; ‡ and that he was possessed of a very

* Eginhart, *De Vita Caroli Magni*, cap. xxvi. edit. Bessell.

† Mosh. *Ecccl. Hist.* 8vo. vol. II. pag. 98.

The notes of Bessellus and others upon this passage of Eginhart [*Legendi atque psallendi disciplinam diligentissime emendavit*] are very curious, as they declare what were the abuses in singing which Charlemagne laboured to reform. Quantum veteres sono vocum distincto studuerint, vel illud argumento est, quod phnaso sedulam dederint operam, teste etiam de *Augusto* Sueton. cap. lxxiv. Ceterum de *musice condicione et officio Ambrosiano* à Carolo correctæ, proluxit Sigebertus, ad an. 774 & 790. Gobein. *Persoon. etas.* 6. *Cosmodrom.* cap. xl. p. 193. *Guliel. Durandus*, lib. V. *Rational. Divin. Offic.* cap. li. Frid. Lindenbrogii *Glossar. L. L. Antiq.* fol. 1369, & Goldast. in *Ekkhardi Junioris scriptis*, pag. 114. *Ion. I. Rer. Alamannic.* Bessellus. Carolus dissonantiam cantus inter Romanos & Francos offensam, cum conciliare & emendare omnibus viribus studuit; ideo a papa cantores Romanos sibi mitti petiit, qui Francos vera psallendi ratione imbuerent. Horum duos accepit, ex quibus unum palatio suo præfeci, alterum Metas misit, qui etiam ejus urbis incolæ ita in canendi scientia erudit, ut sicut Roma inter omnes cantu, sic Metas inter Francos emineret, & seminarium quasi cantorum Claspinorum esset. Ab hac igitur urbe cantilena ecclesiastica Germanicæ tunc temporis mæte dicebatur, quia hic præcipue cantus excolebatur, cujus denominationis vestigia adhuc hodie in vulgari locutione, id est *Frâ mette stagen*, deprehenduntur. Horisum maxime majorum nostrorum erat cantus, quem Monach. Egolism. in *Vita Karoli M. ita* describit: *Træmulus vel vinnulus, seu collibillus, seu scæbillus voces in cantu non poterant perfecte exprimeræ Franci, naturali voce barbarica fragrans in gutture voces potius, quam experimentes.* Clarius Ekkhard. Minim. in vit. Notkeri, cap. viii. *Alpina* æquidem corpora, sit, vocum eorum tonitruis gliscione perstreperit, rursus modulationis dulcedinem proprio non reutilant, quia tribuli gutturis barbara grossitas, dum inflectionibus et repercusitionibus et diapasonarum diptentibus mitem nititur adere cantilenam, naturali quodam fragore, quasi pleuretra per gradus confusus sonantis, rigidas voces jactat, atque audientium animos, quos mæcere debebant, tales exasperando magis ac obstrependo conturbant. Nemo hæc opinor, mirabitur, qui fragmenta antiquæ Germanorum lingue legit, ex quibus satis æstimari potest, quam difficilis fuerit Teutonice lingue pronuntiatio, ac proinde modulatio. Schmincke.

‡ His behaviour in this respect seems to have been widely different from that of Alphonsus, king of Spain, who, in the year 1080, banished the Gothic Liturgy out of his kingdom, and introduced the Roman

considerable portion of this latter quality, and entertained a mild and forgiving disposition towards those who had offended him, may be inferred from that very pretty story related by Mr. Addison, in the *Spectator*, No. 181, of the princess Imma, his daughter, and his secretary Eginhart, and her ingenious device, by carrying him on her back through the snow, to prevent the discovery of an amour which terminated in their marriage.

The purity to which the Gregorian chant was restored by the zeal of Charlemagne, subsisted no longer in France than to the time of Lewis the Debonnaire, his son and immediate heir, who succeeded to the empire of the West in 814; for in his reign the music of the church was again corrupted to that degree, that the Gregorian chant subsisted only in the memory of certain Romans, who had been accustomed to the singing it; for neither were there in France or at Rome, any books wherein it had been written. This strange circumstance is related by Amalaricus Fortunatus, a principal ecclesiastic in the chapel of Lewis the Debonnaire, who himself was sent by Lewis to request of Gregory IV. then pope, a sufficient number of singers, to instruct the people; by whom the pope sent to the emperor for answer, that he could not comply with his request, for that the last of those men remaining at Rome had been sent into France with Walla, who had formerly been ambassador from Charlemagne on the same errand. The words of Amalaricus, in the preface to his book *De Ordine Antiphonarii*, are these: 'When I had been a long while affected 'with anxiety, on account of the difference among 'the singers of antiphons in our province, and did 'not know what should be rejected and what retained, 'it pleased him who is bountiful to all, to ease me 'of my scruples; for there having been found in the 'monastery of Corbie, in Picardy, four books, three 'whereof contained the nocturnal, and the other the 'diurnal, office, I strove to make all the sail I could 'out of this sea of error, and to make a port of 'quiet; for when I was sent to Rome by the holy 'and most christian emperor, to the holy and most 'reverend father Gregory, concerning these books, 'it pleased his holiness to give me the following

office, though miracles were pleaded in favour of the former. Talent. ann. 1080. col. I. and vide Marianus, in his history of Spain, book IX. pag. 152. The circumstances of this extraordinary event, and the miracles that preceded it, are more particularly related by other historians, who speak to this purpose:—Alexander II. had proceeded so far in the year 1068, as to persuade the inhabitants of Arragon into his measures, and to conquer the aversion which the Catalonians had discovered for the Roman worship. But the honour of finishing this difficult work, and bringing it to perfection was reserved for Gregory VII. who, without interruption, exhorted, threatened, admonished, and intreated Sanctius and Alphonsus, the kings of Arragon and Castile, until, fatigued with the importunity of this restless pontiff, they consented to abolish the Gothic service in their churches, and to introduce the Roman in its place; Sanctius was the first who submitted to this innovation, and in the year 1080 his example was followed by Alphonsus. The methods which the nobles of Castile employed to decide the matter were very extraordinary. First, they chose two champions, who were to determine the controversy by single combat, the one fighting for the Roman liturgy, the other for the Gothic. The fiery trial was next made use of to terminate the dispute; the Roman and Gothic liturgies were committed to the flames, which, as the story goes, consumed the former, while the latter remained unblemished and entire. Thus were the Gothic rites crowned with a double victory, which however was not sufficient to maintain them against the authority of the pope, and the influence of the queen Constantia, who determined Alphonsus in favour of the Roman service. Vide Bona De Rebus Liturg. lib. I. cap. ix. pag. 216. Le Brun, loc. citat. pag. 292. Jo. de Ferreras, *Hist. de l'Espagne*, tom. III. pag. 237. 241. 246. Mosh. *Ecccl. Hist.* vol. II. pag. 341.

'answer: "I have no singers of antiphons, whom "I can send to my son and lord the emperor; the "only remaining ones that we had, were sent from "hence into France with Walla, who was here on "an embassy." By means of these books, I discovered a great difference between the antiphons of our singers and those formerly in use; the books contained a multitude of responsaria and antiphons, which they could not sing; among them I found one of those which were ordained by the apostolic Adrian. I knew that these books were older than that which remained in the Roman city, and though in some respects better instituted, yet they stood in need of some corrections, which, by the assistance of the Roman book, might be made of them: I therefore took the middle way, and corrected one by the other.' Notwithstanding this labour of Amalarius to reform the antiphonary, Nivers asserts, that the corruptions of music were then so great, that it was very difficult to say where the Gregorian Chant lay; * and, after all, the corrections of it by Amalarius Fortunatus were very ill received, as will appear by the following account of him.

SYMPHOSIUS AMALARIUS, or, as he is called by most writers, AMALARIUS FORTUNATUS, was a deacon of Metz, and, as some ancient manuscripts assert, also an abbot. There seems to have been another of the latter name, archbishop of Treves, with whom he is often confounded; they both flourished about the middle of the ninth century. This of whom it is meant here to speak was a great ritualist, and wrote four books on the ancient ecclesiastical offices, which he dedicated to Lewis the Debonnaire, by whom he seems to have been greatly favoured. In these books he gives mystical reasons for those rites and ceremonies in divine worship, which wiser men look on as mere human inventions. To give a specimen of his manner of treating this subject, speaking of the habits of the priests, he says, 'The priest's vest signifies the right management of the voice; his albe, the subduing of the passions; his shoes, upright walking; his cope, good works; his stole, the yoke of Jesus Christ; the surplice, readiness to serve his neighbour; his handkerchief, good thoughts; and the pallium, preaching.†

* The true causes of the first corruptions of the Cantus Gregorianus are plainly pointed out by the interpreter of Hugo Reutlingensis, who, in the passage cited by Sir Henry Spelman, ascribes it to the disuse of the stave, the cliffs, and other characters, necessary in the notation of music. To the same purpose Nivers relates, that they were not marked by notes, but by little points and irregular characters; which account is confirmed by some manuscripts, in which the corrupt method of notation above hinted at does most evidently appear. Martini of Bologna has exhibited some curious examples of this kind, and has with no less ingenuity than industry, from characters the most barbarous that can be conceived, and which were intended to express the initial clauses, and also the eunouae of sundry antiphons, as used in particular churches, extracted a meaning, and reconciled them to the true method of notation.

† An opinion something like this, touching the mystical signification of habits and the manner of wearing them, seems to have been entertained by the common-law judges in the reign of king James, as appears by a solemn decree or rule, made by all the judges of the courts at Westminster, on the fourth day of June, 1635, for the purpose of appointing what robes they should thenceforth wear, upon ordinary and special occasions. In this decree mention is made of the scarlet casting-hood, which is by the decree directed to be put above the tippet, for which it is given as a reason that 'justice Walmsley and justice Warburton, and all the judges before, did wear them in that manner, and did declare, "that by wearing the hood on the right side and above the tippet, was "signified mere temporal dignity; and by the tippet on the left side only, "the judges did resemble priests." Dugd. Origines Juridicales, pag. 102.

The author from whom the above passage is cited, craves leave to

But the book of Amalarius Fortunatus which more immediately relates to choral service, or the music of the church, is intitled, *De Ordine Antiphonarii*. In this he vindicates the disposition of the anthems, responses, and psalms, which he had made in the antiphonary, for the use of the churches in France. It seems, that in this and other of his works, he had censured the usage of the church of Lyons: this drew on him the resentment of two very able men, Agobard, archbishop of that city, and Florus, a deacon of the same church; the former of these wrote three treatises against his book of offices, and his correction of the antiphonary; and the latter accused him, in the councils of Quierci and Thionville, of maintaining erroneous opinions touching the moral and mystical significations of the ceremonies, and of insisting too strenuously on the use of the Roman ritual, which, notwithstanding its authority, had never been generally acquiesced in.

Agobard himself had corrected the antiphonary of his own church; and the treatises which he wrote against Amalarius, were not only a defence of those corrections, but a censure of his adversary. He says, that the poetical compositions of vain and fantastical men are not to be admitted into divine service, the whole of which ought to be taken from the scriptures: he complains, that the clergy spent more time in the practice of singing than in the study of the holy scriptures, and the discharge of their duty in the ministry of the gospel.

The writings of Amalarius upon the offices had given rise to many very captious questions; and to this in particular, Whether it be lawful to spit immediately after receiving the eucharist? His opinion on this point of theology is contained in one of his letters, wherein, after premising that he himself was very much troubled with phlegm, he holds it lawful to spit, when the communicant can no longer forbear that evacuation.‡

From the time of the attack on him by Agobard, and Florus, his deacon, we hear no more of Amalarius Fortunatus; and there is good reason to believe, that immediately after it, his memory sank into oblivion.

Before we dismiss this subject of the Cantus Gregorianus, it may not be improper to mention, that it has ever been held in such high estimation, that the most celebrated musicians in every age since its first institution, have occasionally exercised themselves in composing harmonies upon it; and numberless are the antiphons, hymns, misereres, and other offices, which have one or other of the ecclesiastical tones for

mention a word or two concerning the collar of S.S. worn by the chief justices and chief baron, some orders of knights, the kings at arms, and others. Touching this badge of distinction, he, upon the authority of Georgius Wicellus, relates, that it had a reference to two brethren, Roman senators, named Simplicius and Faustinus, who suffered martyrdom under the emperor Dioclesian; and gives the following description of it from his author:—"It was the custom of those persons (the society of St. Simplicius) to wear about their necks silver collars, composed of double S.S. which noted the name of St. Simplicius. Between these double S.S. the collar contained twelve small plates of silver, in which were engraved the twelve articles of the creed, together with a single trefoyle. The image of St. Simplicius hung at the collar, and from it seven plates, representing the seven gifts of the Holy Ghost."

Dugdale adds, 'that the reason of wearing this chain was in regard that these two brethren were martyred, by tying a stone with a chain about their necks, and casting their bodies into the river Tiber.'

‡ Du Pin. *Nouv. Biblioth. des Aut. Ecclesiast. Sicc. IX.*

their fundamental harmony. In a collection of madrigals, intitled *Musica Divina*, published by Pietro Phalesio, at Antwerp, in 1595, is one composed by Gianetto Palestina, beginning 'Vestiva 'i Colli,' in five parts, which is evidently a praxis on the fourth tone; and in 1694, Giov. Paolo Colonna, of Bologna, published certain of the psalms, for eight voices, 'Ad ritum ecclesiasticæ musices concinendi.'

CHAP. XXXI.

It is highly probable that from the time of its original institution the cantus ecclesiasticus pervaded the whole of the service; but this at least is certain, that after the final improvement of it by St. Gregory, all the accounts of the Romish ritual, and the manner of celebrating divine service in the western church, lead to the belief that, excepting the epistles and gospels, and certain portions of scripture, and the passion or martyrlogy, the whole of the service, nay that even the prayers and penitential offices, were sung. Among the canons of Elfric, made anno 957,* is the following:—

'Now it concerns mass-priests and all God's servants to keep their churches employed with divine service. Let them sing therein the seven 'tide-songs that are appointed them, as the synod earnestly requires, viz., the uht-song, the prime-song, the undern-song, the midday-song,† the noon-song, the even-song, the seventh [or night] song.' Can. xix. What these severally are, may be seen in a collection of ecclesiastical laws by the reverend and learned Mr. Johnson of Cranbrook, who has bestowed a note on the passage.

The twenty-first of the same canons is in these words:—'The priest shall have the furniture for his 'ghostly work before he be ordained, that is the holy 'books, the psalter and the pistol-book, gospel-book, and mass-book, the song-book, and the hand-book, the kalender, the pasconal,‡ the penitential, and the 'leason-book. It is necessary that the mass-priest 'have these books; and he cannot be without them 'if he will rightly exercise his function, and duly inform the people that belongeth to him.'

These injunctions may seem to regard the celebration of mass, as well on festivals as on ordinary occasions, in cathedral and other churches; nevertheless the practice of singing, by which in this place nothing can possibly be understood but the Cantus Gregorianus, was not restrained either to the solemn choral service, or to that in parish-churches,

* Elfric is supposed to have been archbishop of York about the time above-mentioned, and Wulfm, to whom they are directed, Bishop of one of the ancient sees of Dorchester or Shitburn, but which of the two is rather uncertain. This, as also some other collections of ecclesiastical laws here cited, are to be found in Sir Henry Spelman's *Councils*; but the extracts above given are from Mr. Johnson's valuable and useful work, which in some respects is preferable to the former.

† Midday-song was certainly at twelve o'clock, which we call noon; and the canon above mentions both a midday and a noon-song; this noon was the hora nona with the Latins, and our three o'clock. In the Shepherd's Almanac noon is midday, high noon three. Vide Johnson's *Canons*, title King Edgar's Laws Ecclesiastical, in a note on law v.

High noon is expressly mentioned in the old ballad of Chevy-Chase—
And long before highe noone they had

An hundrede fat buckes slaine;

‡ i. e. The Pasconal or Martyrlogy.

but in short it was used in the lesser offices. In the English-Saxon homily for the birth day of St. Gregory, the people are told that it was one of the injunctions of that father that the litany should be sung, and upon certain occasions to the number of seven times a-day. Among the ecclesiastical laws of king Canute, who reigned from 1016 to 1035, is one whereby the people are required to learn the Lord's prayer and the creed, because, says the law, 'Christ 'himself first sang pater-noster, and taught that 'prayer to his disciples.' Mrs. Elstob in her preface to the translation of the above homily, pag. 86, has inserted this law, and on the words *Ungit reallj range Pater Noster* has the following note:— 'Singing the service was so much in practice in these 'times, [i. e. about the sixth century, when Austin the 'monk was sent by Gregory into Britain] that we find 'the same word *jingan* to signify both to pray and 'sing, as in the present instance.'

Farther, among the canons of Elfric above-cited is one containing directions for visiting the sick, wherein that rule of St. James, 'And they shall pray over 'him,' is expressed in these words, *7 hi him opej jingon* that is, 'they shall sing over them.' The passage above-cited is part of the thirty-first of Elfric's canons, and is in truth a paraphrase on the words of St. James in his General Epistle, chap. v. ver. 13, 14, and, to give it at length, is as follows:— 'If any of you be afflicted, let him pray for himself 'with an even mind, and praise his Lord. If any be 'sick among you, let him fetch the mass-priests of the 'congregation, and let them sing over him, and pray 'for him and anoint him with oil in the name of the 'Lord. And the prayer of faith shall heal the sick, 'and the Lord shall raise him up; and if he be in 'sins, they shall be forgiven him: confess your sins 'among yourselves, and pray for yourselves among 'yourselves, that ye be healed.'

The several passages above-cited, as they show in some measure the ancient manner of celebrating divine service, and prove that almost the whole of it, particularly the lesser offices, was sung to musical notes; so do they account for that care and assiduity with which the study of music appears to have been cultivated in the several monasteries, schools, and universities throughout Europe, more especially in France and England. That the knowledge of music was confined to the clergy, and that monks and presbyters were the authors of most of the treatises on music now extant, is not so well accounted for by the general course of their lives, and the opportunities they had for study, as by this consideration, it was their profession; and to sing was their employment, and in a great measure their livelihood.§ The works of Chaucer and other old poets abound with allusions to the practice of singing divine service, and with evidences that a knowledge of the rudiments of singing was essential in every cleric, indeed little less so than for such a one to be able to read. In the Vision of Pierce Plowman, Sloth, in the character of a priest,

§ The statutes of All-Souls college, in Oxford, which are but declaratory of the usage of ancient times, require that those elected to fellowships should be 'bene nati, bene vestiti, et medicritur docti in plano cantu.'

among other instances of laziness and ignorance, confesses that he cannot perfectly repeat his Pater-noster as the priest singeth it; and that though he had been in orders above thirty years, he can neither sol-fa, nor sing, nor read the lives of saints: the whole of his speech, which is exceedingly humorous and characteristic, is here inserted:—

Than came Sloth, all beslaberd, with two slimy eyne,
I muft sit faid the leg, or els I muft nedes nap,
I mai not stond ne stoupe, ne without my stole knele,
Wer I brought a bed, but if my talent it made,
Should no ringing do me rise, or I were ripe to dine,
He began benedicite with a belke, and on his breast knocked
And raskled and rored, and rut at the laft.
Awak, reuk quod Repentance, and rape thee to the shrift.
If I should die by this day, me lyft not to looke:
I can not perfitly my pater noster, as the priest it fingeth,
But I can rimes of Robenhod, and Randal of Chester,
But of our Lord or our Lady, I lerne nothing at all;
I have made vows xl, and forgotten hem on the morow;
I performed never penance, as the priest me hight,
Ne right sory for my finnes, yet was I never;
And if I bid any beades, but it be of wrathe
That I tel with my tong, is two mile from my hart;
I am occupied every day, holy day and other
With idle tales at the ale, and other while in churches.
God's peyne and his passion, ful selde I thinke thereon,
I vifited never feble men, ne fettred folk in pittes,
I have lever hear an harlotry, or a fommers game
Or leffinges to laugh at, and belye my neighbours,
Than al that ever Marke made, Mathew, Jhon, and Lucas,
And vigiles and fasting daies, all thefe I let passe,
And lie in bed in Lent, and my lemman in mine armes
Till mattens and masse be done, and than go I to the feres,
Com I to 'Ite missa est,'^o I hold me served;
I am not shriven sometime, but if fickenes it make.
Not twife in two year, and than up guesse I thrive me.
I have been priest and person passing thirty winter,
Yet can I neither solfe nor sing, ne fainctes lives read,
But I can finde in a feldre, or a furlong, an hare,
Better than in Beatus vir, or in Beati omnes
Construe one clause, and ken it to my parishens.
I can hold loue daies, and heare a revenes reckening,
And in cannon and in decretals I cannot read a line
Yf I bugge and borrow ought, but if it be tailed
I forget it as sonne, and if men me it aske
Six fithes or seven, I forsake it with othes,
And thus tene I true men, ten hundred times,
And my fervauntes salary sometimes is behind,
Ruth is to hear the reckening, when we shal mak account;
So with witheld wil and with wrath my workmen I pai.
Yf any man do me benefite, or helpe me at nede
I am unkind against his curtesi, and cannot understand it,
For I have and have had some deale haukes maners.
I am not lured with love, but if ought be under the thombe
That kindnes that mine even chrisften, kid me further
Sixe fithes I Sloth, have forgotten it fithes.
In spech and in sparing of spence, I spilt many a time
Both flesh and fish, and many other vitalles,
Both bread and ale, butter, milke, and chese,
For Slouth in my service til it mighte serve no man.
I ran about in youth, and gave me not to learning,
And ever fith have ben a beggar for my foule slouth.†

The foregoing account, as it relates solely to the Cantus Gregorianus, must be supposed to contain only the history of the choral music of the western church; for it is to be remembered that antiphonal singing was introduced by the Greek fathers, and was first practised in the churches of the East; and

^o i. e. See an explanation of these words in a subsequent note. The meaning of the above passage is, 'If I come before the instant the people are dismissed from mass, I hold it sufficient.'

† Vision of Pierce Plowman, Passus quintus.

that the cantus of the Greek church, whatever it was, was not near so well cultivated and refined as that of the Roman; this consideration, together with the short duration of the eastern empire, may serve to show how little is to be expected from an enquiry into the nature of the ancient Greek choral music. Vossius says in general, that the Greek church made use of modulations different from those of the western; † but for a formula of them we are very much to seek. As to the method of notation made use of by the Greeks in after-times, it did not in the least resemble that of the Latins, and was widely different from that of the ancient Greeks. Mont-faucon, in his *Palæographia Græca*, lib. V. cap. iii. gives a curious specimen of Greek musical notation from a manuscript of the eleventh century. (See Appendix, No. 38.)

Dr. Wallis had once in his hands a manuscript, which upon examination proved to be a Greek ritual; it had formerly been part of the famous library founded at Buda by Matthæus Corvinus, king of Hungary, in 1486. In 1529 the city of Buda was taken by the Turks, and in 1686 retaken, after a long siege, by the forces of the emperor Leopold.

A description of this manuscript, and a general account of its contents is extant in a letter of Dr. Wallis to some person, probably the owner of it, who seems to have referred to the Doctor as being well skilled in music; the doctor's opinion of it may be seen in the copy of his letter inserted at length at the bottom of the page. § It has lately been

‡ Ger. Voss. *De Scientiis Mathematicis*, cap. xxi. § 13.

§ 'Sir, I have seen and cursorily perused that ancient Greek manuscript which is said to have been found in Buda, at the taking of that place from the Turks in the present war between the German emperor and the Turk.'

'It is elegantly written in a small Greek hand, and is judged to be at least three hundred years old. The form of the letter is much different from that of those which we now use, and not easy to be read by those who are not acquainted with the Greek hand used in the manuscripts of that age.'

'It bears, after the first three leaves, this title *Αρχη συν Θεω αγιω της παπαδικης Τεκνης*, which I take to intimate thus much:—Here begins, with the assistance of the sacred Deity, the patriarchal art; for I take *παπας* then to signify as much as pope or patriarch, which is farther thus explained:—*ακολουθια ψαλλόμενα εν Κωνσταντινουπολει, συντιθεσαι ταρα των κατα χειρας ευρισκομενων εν αυτη ποιητων παλαιων τε και νεων*. That is, the order of services in Constantinople composed by poets, such as from time to time have been there found, as well ancient as modern; so that it seems to be a pandect or general collection of all the musical church-services there used, as well the more ancient, as those which were then more modern; after which it thus follows:—*ων η αρχη σημειοι δια και αι τετων φωναι*, beginning with the musical notes and their sounds.

'After which title we have accordingly for about five leaves, an account of the musical notes then in use, their figures, names, and significations; without which the rest of the book would not be intelligible, and even as it is, it will require some sagacity and study, to find out the full import of it, and to be able to compare it with our modern music.'

'The rest of the book consists of anthems, church-services for particular times, and other compositions, according to the music of that age, near a thousand I guess of one sort or other, or perhaps more.'

'The whole consists of four hundred and thirteen leaves, close written on both sides in a small Greek hand, in the shape or form of what we would now call a very large octavo, on a sort of thick paper used in the eastern countries at that time.'

'There is for the most part about twenty-eight lines in each page, that is fourteen lines of Greek text, according to which it is to be sung; not such as those which we now use, nor like those of the more ancient Greeks, which they called of which Meibomius gives us a large account out of Alypius. But a new sort of notes, later than those of the ancient Greeks, but before those of Guido Aretinus, which we now use; and commonly two or three compositions in one leaf, with the author's name for the most part.'

'I do not find in it any footsteps of what is now common in our present music; I mean compositions in two, three, four, or more parts; all these, for ought I find, being only single compositions.'

discovered that the MS. abovementioned was the property of Mr. Humfrey Wanley, as appears by a letter of his to Dr. Arthur Charlett, inserted also in the note, in which he offers to part with it to the university of Oxford. It is to be conjectured that the university declined purchasing it, and that Mr. Wanley disposed of it to the earl of Oxford, for in the printed Catalogue of the Harleian manuscripts in the British Museum, No. 1613, is the following article:—

‘Codex chartaceus in 8vo, ut ajunt, majori, diversis manibus scriptus, et Græcorum more compactus; quem Dñs Henrico Worslejo in Terra Sancta peregrinanti dono dedet Notara (Norapā an Norapios;) tunc Metropolitæ Cæsariensis; qui exinde, de mortuo doctissimo suo avunculo, factus est Patriarcha Hierosolymitanus; adhuc, ni fallor, superstes. In illo habentur varia Ecclesiæ Græcæ Officia, Cantica, &c. Græcè descripta, Notulæq; Græcis Musicalibus insignita. Non iis dico, quæ priscis seculis apud Ethnicos Poetas et Philosophos in usu fuerunt; quarum etiamnum nonnullæ restant quasi e Naufragio Tabulæ: sed alterius planè formæ, quas ante plurima secula introductas adhuc retinet hodierna Græcorum Ecclesia.’

Mr. Wanley has inserted the rubrics in the order in which they occur; these are to be considered as

‘That which renders it most valuable is this; we have of the more ancient Greek musicians seven published by Marcus Meibomius in the year 1652, Aristoxenus, Euclid, Nicomachus, Alypius, Gaudentius, Bacchius, and Aristides Quintilianus, before that of Marianus Capella in Latin. I have since published Ptolemy’s Harmonics in the year 1682, and I have now caused to be printed Porphyry’s Commentary on Ptolemy and Bryennius, which are both finished some while since, and they will thereby come abroad as soon as some other things are finished which are to bear them company. All these, except Marianus Capella, in Greek and Latin, and these are thought to be all the Greek musicians now extant.

But all those concern only the theoretical part of music, of the practical part of it, that is, musical compositions of the ancient Greeks, it hath been thought till that, there was not one extant at this day, whereby we have been at a loss what kind of compositions theirs were, and how theirs did agree or disagree with what we now have, and it is a surprise to light at once upon so many of them.

‘This true that all those are more modern than those of Aristoxenus, Euclid, Nicomachus, and others of the more ancient Greeks, being all since the times of Christianity, and such as were used in the Greek church of Constantinople: but they are much more ancient than any were thought to be extant.

Your’s,

‘JOHN WALLIS.’

Copy of Mr. Wanley’s letter to Dr. Charlett.

‘Honoured Sir, London, June 13, 1698.
I cannot forbear sending you word of the good fortune I have lately had to compass a Greek manuscript, which contains the art of singing, with the names, powers, and characters of their musical notes in great variety. And a collection of anthems, hymns, &c. set to their music by the best masters of Constantinople, as intended and used to be sung in their churches upon all the chief festivals of the year. It has likewise the musical part of their common liturgy with the notes; and both these, not only of the later music of the said masters, but very often the more antient too, used before their times. The names of these masters prefixed to their compositions, are about threescore in number, some of which I here set down: [Here follows a long list of Greek names, which it is needless to insert, as the MS. is yet in being and accessible.]

I believe many of their names, and much more their works, might have been long enough unknown to us without the help of this book. Here is likewise a sprinkling of the music used in the churches of Anatolia, Thessalonica, Thebes, and Rhodes, besides that piece called Περσικόν, and other tracts.

The MS. was taken from the Turks in plundering Buda, about the year 1686, and was afterwards bought by an English gentleman for 4*l*. but I lying here at great charges, cannot afford to sell it so cheap. It is about 300 years old, fairly written upon cotton paper, taking up above four hundred leaves in a large 8vo.

The book ought to be placed in the publick library; and if, Sir, you are willing to think that the university will consider me for it, I will bring it along with me the next week: If not, I can be courted to part with it here upon my own terms.

For the Rev. Dr. Charlett, I am reverend and honoured Sir,
Master of University college Your most faithful and obedient servant,
‘In Oxford. HUMFREY WANLEY.’

so many distinct heads, and give occasion for an explanation of many difficult words made use of in them, and also in the offices,* in which he discovers great learning and sagacity.

* To give a few instances. 295. Τροπαρίον. Vox generica, et Canticle in Ecclesia Græca receptis communis: Modulum semper verit, et ANTIPHONAS Latinorum quadantenus respondere observat Goarus. Du Cang.

In Ecclesia Orientali, canebantur certis diebus certi CANONES, quos in ΤΡΟΠΑΡΙΑ dividebant plerumque 30, et nonnumquam plura: excepto uno ΜΑΓΝΟ CANΟΝΗ, qui 250 complectebatur. Sulcer. ex Triodio.

CANONES in ODAS dividuntur; ΟΔΗ in ΤΡΟΠΑΡΙΑ, ex quibus componuntur. Singula namque Troparia continent aut plura aut pauciora, cum eorum Numerus determinatus non sit. Troparia quandoque Libera ac Vaga relinquuntur: quandoque primis Litteris quasi Annula in Verbis veluti Catenula inseruntur, quam Acrostichida autores vocant. Du Cang. ex Allatio de Georgiis.

378. ΑΝΤΙΦΩΝΟΝ, Fœmineum ΑΝΤΙΦΩΝΑ à Neutrio ΑΝΤΙΦΩΝΟΝ discrimen apud nos obtinet maximum: quamvis ab uno Græco vocabulo, utrumque fuerint Latini mutuati: ΑΝΤΙΦΩΝΑ namque est Sententia vel Modulus cuilibet Psalmo decantato adjunctus, et quasi ex opposito ΡΕΣΠΟΝΔΗ, inquit Honorius Solitarius, lib. ii. cap. 17. ΑΝΤΙΦΩΝΟΝ autem ut hic usurpatur Psalmi sunt plures Verus, ad quorum singulos, una et eadem sit semper ab altero Choro Responsio: et propter hanc Unam et Reciprocam Sententiam semper illatam, ΑΝΤΙΦΩΝΟΝ, quasi vox opposita, seu Vocis opposito vocatur. Ejus forma qualis sit, ex his Mysallibus Antiphonis (i. e. Liturgiæ S. Chrysostomi) fol. 105, et seq. positus innoscitur. Extat enim ibi Psalmus ἀγαθὸν τὸ ἱερολογεῖσθαι τὸ κερὶ κυρίου cuius singulis versibus respondet ΑΝΤΙΦΩΝΟΝ ΤΑΙΣ ΠΡΟΣΕΔΙΑΙ ΤΗΣ ΔΙΔΟΧΗΣ & τὰ ἐξῆς, illis sæpius ΟΡΘΟΚΛΗΝΟΝ. Quamvis fatear rem potius in adversum sensum trahendam. cum enim Psalmus ipse vocatur ΑΝΤΙΦΩΝΟΝ, ejus Versus sunt qui uni et eidem dicto, i. e. resumpto (ἐρμηνεύει ejus frequentius repetito) ΟΡΘΟΚΛΗΝΟΝ. Vel certe, quia mutua et utriusque Chori ad invicem Responsio: et voces jam audite, rursus vel ex toto, vel ex parte, iterantur prout quoque in Latinis ΡΕΣΠΟΝΔΗ contingit) ΑΝΤΙΦΩΝΟΝ appellatur. Unde, tum propter Vocis Significationem, tum propter Compositionis formam, Latine ΡΕΣΠΟΝΔΟΡΙΟΝ congrue reddi posset. Vetat tamen Usus loquendi antiquus, ut Missæ Introitu alio quam ΑΝΤΙΦΩΝΟΝ vel ΑΝΤΙΦΩΝΗ Nomine dicatur, &c. Goar.

428. Τρισάγιον, ΤΡΙΣΑΚΤΟΝ, Hymni genus, cujus hæc erant Verba, Ἄγιος ὁ Θεός, ἅγιος ἰσχυρός, ἅγιος ἀθάνατος, ἱλεῖσθαι ἡμᾶς: in quo ἅγιος ὁ Θεός referebatur ad Deum Patrem; ἅγιος ἰσχυρός ad Deum Filium; ἅγιος ἀθάνατος ad Spiritum sanctum. Vocatur etiam τρισάγιος ὕμνος, χερυβικὸς ὕμνος, ἀγγέλων ὕμνος, τρισάγιος αἶνος ἀγγέλων ὕμνος, ὕμνος τοῦ κυρίου. Anno enim Theodosii Junioris quinto (vel trigesimo secundum Cedrenum, &c.) magno exstante Terræ Motu, et Muris corruentibus, quia Amalechitis intra Urbem inhabitarent, et adversus Hymnum hunc Blasphemias proloquerentur: Preces et Supplicationes in Campo Tribunalis, Theodosius cum Proclo Patriarcha instituit. Cum vero κύριος ἱλεῖσθαι clamarent Horis aliquot continuas, Adolescentulus quidam in conspectu omnium in aërem sublatu est, auditivique Angelos clamantes, Ἄγιος ὁ Θεός, ἅγιος ἰσχυρός, ἅγιος ἀθάνατος, ἱλεῖσθαι ἡμᾶς. Quod cum mox demissus narrasset, omnes eodem modo Τρισάγιον canere cœperunt, et cessavit Terræ Motus. Hunc Hymno Imperator Anastasius post illa ἅγιος ἀθάνατος addi voluit ο ζαυροειδης ὑπὲρ ἡμεν, verum id cum magno Malo et suo, et Constantinopolitanorum.—Observandum tandem discrimen quod est inter το Τρισάγιον et ὙΜΝΟΝ ΕΡΜΗΝΙΟΝ, in quo similiter Ἄγιος canebatur, hunc in modum, ἅγιος, ἅγιος, ἅγιος κύριος σαβῶθ —Ergo τρισάγιον initio Liturgiæ ante Epistolæ Lectionem canebatur. Hymnus vero ΣΚΕΥΒΥΚΟΣ et ἱπινίκιος, post Catechumenorum et Penitentium dimissionem. Τρισάγιον quoque usurpabant pro Sacrosancta Trinitate. Sulcer.

441. Χορός, proprie notat Cantentium atque Saltantium collectam Multitudinem, notum est in Ecclesia hodie Psalmodium retineri, et quidem ΧΟΡΟΝ, quibusdam in Locis, bifariam diviso. Improprie notat Multitudinem amice conspirantium in doctrina, &c. Sulcer.

Χορός, dividebantur χοροὶ in δεξιόν, ΔΕΧΤΕΡΟΝ, et ἀριστερον, ΣΙΝΙΣΤΕΡΟΝ. Triodum in Sabbato Sancto ἀρχεται ἀνθὺς μετὰ μελὸς ὁ δεξιὸς ἤλιος ὁ πρῶτος χορός, in quo quidem ΔΕΧΤΕΡΟΝ ac ΣΙΝΙΣΤΕΡΟΝ consistit Sacerdos qui sacræ Liturgiæ præstat. Du Cang.
The practice of dividing the chorus into two parts, and disposing the singers on both sides of the choir, seems best of any method to correspond with the intention of antiphonal or responsive singing. But it is to be remarked that in the Romish service there are many offices composed for four, and even eight choirs as they are termed. These are in fact not distinct choirs, but rather so many smaller chorusses, singing alternately with each other, and together at stated intervals; and these are also divided according to the choral order, and stationed on both sides of the choir. In our English service-books the two different sides are distinguished by the names of the officers that superintend them respectively; for instance, as the seat of the Dean is on the right, those on that side are directed when to sing by the word Decani; and as the station of the præcentor or chanter is on the left, those on that side are directed by the word Cantoris. The Dean and the Precentor are the

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But as a mere verbal description of this MS. would fail to convey an adequate idea of the character in which it is written, or of the musical notes, which are the principal object of the present enquiry, the initial and final pages of the volume are given in that kind of transcript which the curious distinguish by the appellation of facsimile. (Appendix, Nos. 39, 40.)

It is very clear from that letter that Dr. Wallis looked upon manuscripts of this kind as a very great curiosity; and this judgment of his is founded upon an opinion which he says prevailed at the time of giving it, that there was no such thing as an ancient Greek musical composition extant.

The causes of this scarcity of Greek ritual music are to be sought in the history of that church. It has already been related that choral service was first introduced by the Greek fathers, and that as the pomp and splendour of the Greek worship was very great, and calculated to engage the affections of the people, the greater part of the offices were sung. The consequence thereof was, that the clerks employed for that purpose were of little less estimation than those that exercised the sacerdotal function. This appears from a passage in the liturgy of St. Mark, wherein is a prayer for priests, deacons, and singers.* We may hence conclude that a ritual of some kind or other subsisted in that very early age; and it is very probable that that kind of melody which St. Ambrose instituted in his church at Milan, was no other than what was used by St. Basil and Chrysostom in their several churches in Asia, since it is apparently founded on the ancient Greek modes. The music of the Greek church might in all probability continue to flourish until the translation of the imperial seat from the East to the West; and as after that important event that church lost the protection of an emperor, and was left in a great measure to shift for itself, its splendour, its magnificence and discipline declined apace, and it was not the authority of a patriarch that was sufficient to support it.

But the ruin of the Greek church was completed in the taking and sacking of Constantinople by the

officers of the greatest dignity in all choral establishments, but there are others which usage and successive endowments have authorized and the canon law recognises; for which reason a brief delineation of Cathedral Polity as it subsists in England and elsewhere may seem but a necessary adjunct to this note. The Bishop is properly the head of the church, and the Presbyters who are variously termed Canons or Prebendaries, though their offices in the choir are but ill-defined by the canonists, are his council, and were anciently ten in number. In the choral functions the Precentor presided till about the middle of the sixteenth century, but afterwards when endowments began to be made of cathedral and collegiate churches, it was thought unfit that he who was at most but one of the Choir should govern as well as direct the rest; this made the office of Dean necessary, which being a term borrowed from the military discipline and derived from Decanus, and that from δέκα, ten, imports a right of presiding over ten subordinates; these in their corporate capacity are styled Dean and Chapter.—The Dean is then to be considered as Arch-presbyter and head of the choir, as the Bishop is of the church; next to him in legal order follows the Precentor formerly styled Primicerius and in later times Chanter; then the Canons, and after them Minor Canons, who are also Presbyters, and with the Lay Vicars are conjectured to hold the place of the ancient Psalmists or Canonical Singers, who in a Canon of the Council of Laodicea are described as singing out of the Parchment; lastly Choristers or Singing Children. Vide Bp. Wettenhall, of Gifts and Offices, page 523 et seq.

442. Κανονάρχης. PRÆFECTUS CANONUM, qui Monachos ad psallendos in Vigiliis Canones excitabat. Suicer.

509. Πρωτοψάλτης, PRIMICERIVS CANTORUM; qui dictus etiam δομίσκος τῶν ψαλμῶν. Verum non habebat Ecclesie Πρωτο-ΨΑΛΤΑΣ, sed DOMESTICOS Cantorum; cum Πρωτο-ΨΑΛΤΑΣ propriè essent Cleri Palatini, &c. Du Cang.

* See a collection of the principal liturgies used in the celebration of the holy eucharist, by Dr. Thomas Brett, pag. 34.

Turks in the year 1453, when their libraries and public repositories of archives and manuscripts were destroyed, and the inhabitants driven to seek shelter in the neighbouring islands, and such other places as their conquerors would permit them to abide in.

From that time the Greek Christians, excepting those who inhabit the empire of Russia, have lived in a state of the most absolute subjection to the enemies of true religion and literature, and this to so great a degree, that the exercise of public worship is not permitted them but upon conditions so truly humiliating, as to excite the compassion of many who have been spectators of it. Maundrel in his Journey from Aleppo to Jerusalem, mentions his visiting a Greek church at a village called Bellulca, where he saw an altar of no better materials than dirt, and a crucifix of two bits of lath fastened cross-wise together.†

A modern traveller, Dr. Frederic Hasselquist, who visited the Levant in the year 1749, indeed mentions that in the church at Bethlehem he saw an organ, but it seems that it belonged to the Latin convent: as to the Greek Christians he represents them as living in a state of absolute poverty and dejection in almost all the places that he visited.

Laying all these circumstances together, it will cease to be a wonder that so few vestiges of the Greek church-music are now remaining, whatever others there are may possibly be found in the Russian ritual; but as no one can say how far that may have deviated from the primitive one, it is to be feared that an enquiry of this kind would elude the utmost efforts of industry.‡

CHAP. XXXII.

ISIDORE, bishop of Seville, is frequently ranked among the writers on music, for this reason, as it seems, that he was the author of *Originum, sive Etymologiarum*, a kind of epitome of all arts and sciences, in which are several chapters with the following titles, as Cap. i. De Musica et ejus Nomine. Cap. ii. De Inventoribus ejus. Cap. iii. Quid sit

† 'Being informed that here were several Christian inhabitants in this place, we went to visit their church, which we found so poor and pitiful a structure, that here Christianity seemed to be brought to its humblest state, and Christ to be laid again in a manger. It was only a room of about four or five yards square, walled with dirt, having nothing but the uneven ground for its pavement; and for its ceiling only some rude traves laid athwart it, and covered with bushes to keep out the weather. On the east side was an altar built of the same materials with the wall; only it was paved at top with pot-sherds and slates, to give it the face of a table. In the middle of the altar stood a small cross composed of two laths nailed together in the middle: on each side of which ensign were fastened to the wall two or three old prints, representing our blessed Lord and the blessed Virgin, &c., the venerable presents of some itinerant friars, that had passed this way. On the south side was a piece of plank supported by a post, which we understood was the reading-desk, just by which was a little hole commodiously broke through the wall to give light to the reader. A very mean habitation this for the God of heaven! but yet held in great esteem and reverence by the poor people; who not only come with all devotion hither themselves, but also deposit here whatever is most valuable to them in order to derive upon it a blessing. When we were there the whole room was hanged about with bags of silk-worms' eggs; to the end that by remaining in so holy a place, they might attract a benediction and a virtue of encreasing.' Maundrell's Journey from Aleppo to Jerusalem, pag. 7.

‡ A gentleman, who has lately obliged the world with an account of the Greek church, in Russia, speaking of the ritual of the Russians, takes notice that the music of their service books is written on a stave of five lines, from which he rightly infers that the ecclesiastical tones as sung by them are either corrupted, or have widely deviated from their original institution. The Rites and Ceremonies of the Greek Church in Russia, by Dr. John Glen King, pag. 43, in not.

Musica. Cap. iv. De tribus Partibus Musicae. Cap. v. De triformi Musicae Divisione. Cap. vi. De prima Divisione Musicae harmonica. Cap. vii. De secunda Divisione organica. Cap. viii. De tertia Divisione rythmica. Cap. ix. De Musicis Numeris; and also a Treatise on the Ecclesiastical Offices, in both of which there are many things relating to music, and in the former especially, many etymologies of musical terms, and names of musical instruments. His father was Severianus, a son of Theodoric king of Italy; he succeeded his brother Leander in the bishopric of Seville about the year 595, and governed that church near forty years: he was very learned in all subjects, more especially in geometry, music, and astrology; his book on the Offices contains the principal points of discipline and ecclesiastical polity. Mosheim in his chronological tables makes him the principal compiler of the Mosarabic liturgy, which is the ancient liturgy of Spain. He died in the year 636, and has a place in the calendar of Romish saints.

Of the introduction of music into the church-service, of the institution of the four tones by St. Ambrose, and of the extension of that number to eight by St. Gregory, mention has been made; we are now to speak of another very considerable improvement of church music, namely, the introduction of that noble instrument the organ, which we are told took place about the middle of the seventh century. Authors in general ascribe the introduction of organs into churches to pope Vitalianus, who, as Du Pin, Platina, and others relate, was advanced to the pontificate in A. C. 663: the enemies of church music, among whom the Magdeburg commentators are to be numbered, invidiously insinuate that it was in the year 666 that organs were first used in churches,* from whence they infer the unlawfulness of this innovation, as commencing from an era that corresponds with the number of the beast in the Apocalypse: but the wit of this sarcasm is founded on a supposition that, upon enquiry, will appear to be false in fact; for though it is uncontroverted that Vitalianus introduced the organ into the service of the Romish church, yet the use of instruments in churches was much earlier; for we are told that St. Ambrose joined instruments of music with the public service in the cathedral church of Milan, which example of his was so well approved of, that by degrees it became the general practice of other churches, and has since obtained in almost all the Christian world besides. Nay, the antiquity of instrumental church-music is still higher, if we may credit the testimony of Justin Martyr and Eusebius, the latter of whom lived fifty, and the former two hundred years before the time of St. Ambrose. But to return:—

Sigebert relates that in the year 766 the emperor Constantine† sent an organ as a present to Pepin,

* Isaacson on very good authority *Ass II at 660.*

† Surnamed Copronymus, because he is said to have defiled the font at his baptism. *Mosh. vol. II. pag. 92.* in not.

Other writers speak particularly, and say that the first use of organs in

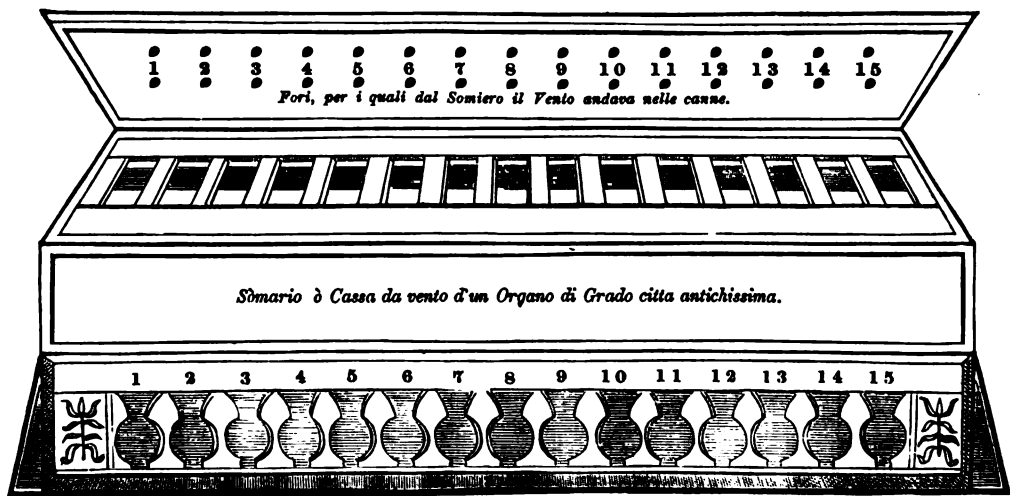
then king of France, though the annals of Metz refer to the year 757; from hence some with good reason date the first introduction of the organ into that kingdom, but it was not till about the year 826 that organs became common in Europe.

Whoever is acquainted with the exquisite mechanism of this instrument, and considers the very low state of the manual arts at that time, will hardly be persuaded that the organ of the eighth century bore any very near resemblance to that now in use. Zarlino, in his *Sopplimenti Musicali, libro VIII.* pag. 290, has bestowed great pains in a disquisition on the structure of the ancient organ; the occasion of it he says was this: a lady of quality, Madonna Laura d'Este, in the year 1571, required of Zarlino, by his friend Francesco Viola, his sentiments of the organ in general, and whether he took the modern and the ancient instrument of that name to be alike or different: in giving his opinion on this question he attempts a description of the hydraulic organ from Vitruvius, which he leaves just as he found it; he then cites a Greek epigram of Julian the Apostate, who lived about the year 364, in which an organ is described. A translation of this epigram in the following words is to be found in Mersennus, lib. III. *De Organis, pag. 113:—*

Quam cerno, alterius naturæ est fistula : nempe
Altera produxit fortasse hæc ænea tellus.
Horrendum stridet, nec nostris illa movetur
Flatibus, et missus taurino e carcere ventus
Subtus agit læves calamos, perque ima vagatur.
Mox aliquis velox digitis, insignis et arte
Adstat, concordēs calamis pulsatque tabellas :
Ast illæ subito exiliunt, et carmina miscent.

As to the organ of the moderns, he says the common opinion is that it was first used in Greece, and from thence introduced into Hungary, and afterwards into Bavaria; but this he refutes, as he does also the supposed antiquity of an organ in the cathedral church of Munich, pretended to be the most ancient in the world, with pipes of one entire piece of box, equal in magnitude to those of the modern church organ: he then speaks of the *sommiero* of an organ in his possession that belonged to a church of the nuns in the most ancient city of Grado, the seat of a patriarch before the sacking of it by Pepo the patriarch of Aquileia, in the year 580. This *sommiero* he describes as being about two feet long, and a fourth of that measure broad, and containing only thirty pipes and fifteen keys, but without any stop; the pipes he says were ranged in two orders, each containing fifteen, but whether they were tuned in the unison or octave, as also whether they were of wood or metal, he says is hard to guess: he says farther that this instrument had bellows in the back part, such as are to be seen in the modern *regali*, and exhibits a draft of this instrument in the following form:—

the western church was at Acon. *Isaacs. Chron. Anno Christi 826. Church Story: but see Bingham, Antiqu. Vol. I 314, a citation from Thomas Aquinas, shewing that they were not in use in his time, viz., 1250.*



Zarlino speaks also of an ancient organ in the church of St. Anthony of Padua, of a convenient bigness, which had many orders of pipes, but no stops; and both these instruments he makes to be much more ancient than that of Munich in Bavaria; concerning the accounts of which he seems to be dissatisfied; for as to the pipes, he says there are no box-trees, except such as grow in the country of Prester John, of a size sufficient to make pipes of one piece so large as those are said to be; and that, after such were found, an organ so constructed as that a single pipe should require a whole tree, is not easily to be conceived of.

He farther takes some pains to shew the error of those who imagine that the organ mentioned by Dante, in the ninth canto of his *Purgatory*, was different in many respects from that of the ancients. The passage in Dante is an imitation of Lucan, lib. III. 'Tunc rupes tarpeia sonat:—

Non ruggio sì, nè sì mostrò sì acra
Tarpeia, come tolto le fu il buono
Metello, donde poi rimase macra.
Io mi rivolsi attento al primo tuono,
E, *Te Deum laudamus*, mi pareo
Udir in voce mista al dolce suono.
Tale imagine appunto mi rendea
Ciò ch' l' udiva, qual prender si suole
Quando a cantar con organi si stea:
Che or sì or no s' intendon le parole.

But upon the whole, he is clearly of opinion that the hydraulic organ of Vitruvius, that other mentioned in the epigram of Julian above-cited, the Bavarian organ, and that in the city of Grado, were essentially the same with the organ of his time.*

* Mersennus seems to carry the antiquity of the organ farther back than Zarlino has done in the passage above cited, and to think that not only the hydraulic but the pneumatic organ, was in use among the Romans, though he has left it to the antiquaries to ascertain the precise time; for speaking of the epigram made in its praise by the emperor Julian, and which is inserted in his (Mersennus's) Latin work, he relates that the Sieur Naudé had sent him from the Matthei gardens at Rome, 'the form of a little cabinet of an organ, with bellows like those made use of to kindle a fire, and a representation of a man placed behind the cabinet blowing the bellows, and of a woman touching the keys.' He says, 'that on the bottom of the cabinet was the following inscription:—*L. APISIUS C. F. SCAPTIA CAPITOLINUS EX TESTAMENTO FIERI MONUMEN. JUSSIT ARBITRATU HEREDUM MEMORUM SIBI ET SUI;* concerning which, he adds, the antiquarians

That choral music had its rise in the church of Antioch, the metropolis of Syria, and that from thence it spread through Greece, and was afterwards brought into Italy, the several testimonies above adduced sufficiently shew: from thence it made its way into France, Britain, Spain, and Germany, and at length was received throughout Christendom. As

'may conjecture what they can; for that it is sufficient that he has given 'the practice of his own age, which, he says, by far surpasses any thing 'that the ancients have left behind on this subject.' *Harm. Univer. lib. VI. pag. 387.*

The monument above spoken of has been recovered. Probably it is extant in some one or other of the collections of the antiquities, published since the time of Mersennus, but the following representation of it was found among the papers of Nicola Francesco Haym, the author of *Il Tesoro Britannico delle Medaglie Antiche*, and as it corresponds exactly with the description of it by Mersennus, it is here inserted:—

L. APISIUS C. F. SCAPTIA CAPITOLINUS EX
TESTAMENTO FIERI MONUMEN. JUSSIT
ARBITRATU HEREDUM MEMORUM SIBI ET SUI;



The same author takes occasion to mention an organ described in an epistle to Dardanus, in the fourth volume of the works of St. Jerome, which, from the many barbarisms that appear in it, he says, ought not to be attributed to that excellent man. This organ, he says, is represented as having twelve pair of bellows and fifteen pipes, and a wind-chest, made of two elephant skins; and as yielding a sound as loud as thunder, which might be heard at more than a thousand paces distance. Mersennus adds, that in the same epistle mention is made of an organ at Jerusalem, which was heard at the mount of Olives. He says, there are many other instruments described in the same epistle; but he remarks, that if the elephant skins above mentioned were sewed together, and were fitted by bellows, the instrument was more properly a cornamusa, or bagpipe, than an organ.

To this account of organs of a singular construction, the following may be added of some less ancient. Fuller, in his *Worthies of Denbighshire*, pag. 33, mentions an organ with golden pipes. Leander Alberti, in his *Description of Italy*, says, he saw one, in the court of the duke of Mantua, of alabaster; and another at Venice, made all of glass; and Pope Sylvester the Second made an organ that was played on by warm water. See *Oldys's British Librarian*, No. 1. pag. 51.

to the time and manner of its introduction into Britain, history has ascertained it beyond a possibility of doubt; for we are expressly told, that at the time when Austin the monk arrived here, charged with a commission to convert the inhabitants of Britain to Christianity, singers attended him: and so watchful were the Roman pontiffs over its progress in this island, that in little more than half a century, one of the most excellent chanters that Rome afforded was sent hither, by Agatho, to reform such abuses as in that short period he might find to have crept into it. That it was received with great eagerness by the people of this country, there are many reasons for thinking; for, first, their fondness for music of all kinds was remarkably great; Giraldus Cambrensis asserts, almost in positive terms, that the natives of Wales and the northern parts of Great Britain were born musicians.

Besides this, there are proofs in history that in a very short time after its first planting amongst us, music was observed to flourish; and that, in short, it loved the soil, and therefore could not fail to grow.

It was in the cathedral church of Canterbury that the choral service was first introduced; and till the arrival of Theodore, and his settlement in that see, the practice of it seems to have been confined to the churches of Kent; but after that, it spread over the whole kingdom. The clergy made music their study, they became proficient in it, and, differing perhaps in that respect from those of other countries, they disseminated the knowledge of it among the laity. Hollinshed, after Bede, describes the progress of singing in churches in these words:—

‘Also, whereas before-time there was in a manner no singing in the Englishe churches, except it were in Kent, now they began in every church to use singing of divine service, after the rite of the church of Rome. The archbishop Theodore, finding the church of Rochester void by the death of the last bishop, named Damian, he ordeyned one Putta, a simple man in worldly matters, but well instructed in ecclesiastical discipline, and namely well seene in song, and musicke to be used in the church, after the manner as he had learned of Pope Gregories disciples.’*

After this, viz., in 677, Ethelred, king of the Mercians, invaded the kingdom of Kent with a great army, destroying the country before him, and amongst other places the city of Rochester; the cathedral church thereof was also spoiled and defaced, and Putta driven from his residence; upon which, as the same historian relates, ‘he wente unto Scroulfe, the bishop of Mercia, and there obteyning of him a small cure, and a portion of ground, remayned in that country; not once labouring to restore his church of Rochester to the former state, but went aboute in Mercia to teach song, and instruct such as would learne musicke, wheresoever he was required, or could get entertainment.’†

* First volume of the *Chronicles of England, Scotland, and Ireland*, pag. 178, col. ii. edit. 1577.

† Ibid. pag. 181.

CHAP. XXXIII.

THE several improvements herein before enumerated, related solely to that branch of music which those who affect to use the terms of the ancients, called the *Melopoëia*; what related to the measures of time, which, has been shewn, were regulated solely by the metrical laws, as they stood connected with poetry, or, to use another ancient term, the *rhythmopoëia* was suffered to remain without innovation till the beginning of the fourteenth century, as it is said, when John De Muris, a doctor of the Sorbonne, and a native of England, though the generality of writers suppose him to have been a Norman, invented characters to signify the different lengths of sounds, and, in short, instituted a system of metrical music.

It has already been mentioned, that till within these few years it was a dispute among the writers on music, whether the ancients, by whom we are to understand the Greek harmonicians and their followers, were acquainted with music in consonance, or not: the several arguments of each party have been stated, and, upon a comparison of one with the other, it does most clearly come out, that music in consonance, though as to us it be of great antiquity, is, with respect to those of whom we are now speaking, a modern improvement.

In fixing the æra of this invention, those who deny that it was known to the ancients are almost unanimous in ascribing it, as indeed they do the invention of the polyplectral species of instruments, which are those adapted to the performance of it, to Guido Aretinus. Kircher was the first propagator of this opinion,‡ which he confesses is founded on a bare hint of Guido; but in this he is mistaken, both in his opinion and in the fact which he assigns as a reason for it; for neither in the *Micrologus* nor in the other tract of Guido, intitled, *Argumentum novi Cantus inveniendi*, of both which a very particular account will be given hereafter, is there the least intimation of a claim to either of the above inventions.

Not to insist farther on this mistake, the fact is, that symphonic music was known in the eighth century, and that Bede does very particularly mention a well-known species of it, termed *Descant*: and this alone might suffice to show that music in consonance, though unknown to the ancient Greeks, was yet in use and practice before the time of Guido, who flourished not till the beginning of the eleventh century; for what are we to understand by the word *Descant*, but music in consonance?

But lest a doubt should remain touching the nature of the practice which the word *Descant* is intended to signify, let us attend to a very particular description of it, contained in an ancient manuscript, formerly part of the Cotton library, but which was destroyed by the accident of fire which happened some years ago, 23 Oct., 1731. at Ashburnham-house, where it was deposited. The passage above mentioned may be thus translated. §

‡ Musurg. tom. I. pag. 215.

§ From a copy made for the use of Dr. Pepusch. Vide Mr. Castley's catalogue.

'If two or three descant upon a plain-song, they must use their best endeavours to begin and proceed by different concordances; for if one of them should concur with another, and sing the same concord to the plain-song, then ought they immediately to constitute another. If you would descant under the plain-song, in the duple, [*i. e.* octave] in the sixth, the fifth, the third, the twelfth, or in the fifteenth, you ought to proceed in the same manner as you would were you to descant above the plain-song; whoever sings above it must be experienced in the grave sounds, their nature and situation; for on this the goodness of the harmony in a great measure depends. Another method of descanting is practised, which, if it be well pronounced, will, though easy, appear very artificial, and several will seem to descant on the plain-song, when in reality one only shall descant, and the others modulate the plain-song in different concordances: it is this, let there be four or five singers, and let one begin the plain-song in the tenor; let the second pitch his voice in the fifth above, the third in the eighth, and the fourth, if there be four besides him who sings the tenor or plain-song, in the twelfth, and all begin and continue in these concordances to the end; only let those who sing in the eighth and twelfth break and flower the notes in such manner as may best grace the measure; and note well, that whosoever sings the tenor must pronounce the notes full in their measure, and that he who descants must avoid the perfect, and take only the imperfect concords, namely, the third, sixth, and tenth, both ascending and descending; and thus a person who is skilled in the practice of descant, and having a proper ductility of voice, may make great melody with others, singing according to the above directions; and for this kind of singing four persons are sufficient, provided there be one to descant continually, in a twelfth above the plain-song.'

Morley, in his Introduction, pag. 70, speaking of the word Descant, indeed says, that 'it is a word usurped of the musitions in divers significations;' yet he adds, 'that it is generally taken for singing a part extempore, on a playne-song; so that when a man talketh of a descanter, it must be one that can extempore sing a part upon a playne-song.'

The practice of descant, in whichever of these two senses the word is accepted, may reasonably be supposed to have taken its rise from the choral service, which, whether we consider it in its primitive state, as introduced by St. Ambrose, or as improved by pope Gregory, consisted either of that plain and simple melody, which is understood when we speak of the Ambrosian or Gregorian chant, or of compositions of the hymnal kind, differing from the former, in that they were not subject to the tonic laws which at different periods had been laid down by those fathers of the church.

Continual practice and observation suggested to those whose duty obliged them to a constant and regular attendance at divine service, the idea of a polyphonous harmony; by means whereof, without disturbing the melody, the ear might be gratified

with a variety of concordant sounds, uttered by a number of voices; and indeed little less than a discovery of this nature was to be expected from the introduction of music into the church, considering the great number of persons whose duty it became to study and practise it; considering also, the great difference, in respect of acuteness and gravity, between the voices of men and boys; and, above all, that nice discriminating sense of harmony and discord, resulting from an attention to the sound of that noble instrument the organ. Platina has fixed the era when the organ was first introduced into churches at the year 660, and gives the honour of it to Vitalianus; and in less than half a century afterwards, we discover the advantages arising from it, in that which is the subject of the present enquiry, the invention of a kind of music consisting of a variety of parts, called descant, the nature whereof is explained above, and is mentioned by Bede, who flourished at the beginning of the eighth century, and not only was extremely well skilled in the science of music, but spent the far greater part of his life in the study and practice of it.

An Italian writer of good authority,* whose prejudices, if he had any, did not lead him to favour the moderns, has gone farther, and ascribed the use of the term to our countryman; and there is extant, in the *Cambriæ Descriptio* of Giraldus Cambrensis, a relation of a practice that prevailed in his time among the inhabitants of this country, not inconsistent with the supposition that either Bede himself, or some of the brethren of the monastery where he resided, might be the inventors of music in consonance.

The relation of Giraldus Cambrensis above referred to is to the following effect:—

'In the northern parts of Britain, beyond the Humber and on the borders of Yorkshire, the people there inhabiting, make use of a kind of symphoniac harmony in singing, but with only two differences or varieties of tones or voices. In this kind of modulation, one person [*submurmurante*] sings the under part in a low voice, while another sings the upper in a voice equally soft and pleasing. This they do, not so much by heart as by a habit, which long practice has rendered almost natural; and this method of singing is become so prevalent amongst these people, that hardly any melody is accustomed to be uttered simply, or otherwise than variously, or in this twofold manner.†

* *Glo. Bat. Deni*, in his treatise *De Generi e de Modi della Musica*, pag. 97.

† In musico modulamine non uniformiter ut alibi, sed multiplex multaque modis et modulis cantilenas emittunt, adeo ut in turba canentium, sicut huic genti mos est, quot videas capita, tot audias carmina discriminatque vocum, varia in unam denique sub B. Mollis dulcedine blanda consonantiam et organicam convenientia melodiam. In borealibus quoque majoris Britanniae partibus trans Humbrum. Eboracique finibus Anglorum populi qui partes illas inhabitant simili canendo symphoniacae utuntur harmoniae: binis tamen solummodo tonorum differentis et vocum modulando varietatibus, una inferius sub murmurante altera vero supernè demulcente pariter et delectante. Nec arte tantum sed usu longævo et quasi in naturam mora diutina jam converso, hæc vel illa sibi gens hanc specialitatem comparavit. Qui adeo apud utramque invaluit et altas jam radices posuit, ut nihil hic simpliciter, ubi multiplex ut apud priores, vel saltem dupliciter ut apud sequentes, mellitè proferri consueverit. Pueris etiam (quod magis admirandum) et ferè infantibus, cum primum à fetibus in cantus erumpunt) eandem modulationem observantibus. Angli verò quoniam non generaliter omnes sed boreales solum hujusmodi vocum utuntur

As this method of singing seems by the account above given of it to have been subservient to the laws of harmony, an enquiry into its origin may lead to a discovery when and where music in consonance was first practised. The author above cited would insinuate that the inhabitants of this country might receive it from the Dacians, or Norwegians; but he has not shewn, nor is there the least reason to think that any such practice prevailed among either of those people; and till evidence to that purpose shall be produced, we may surely suspend our belief, and refer the honour of the invention to those who are admitted to have been in possession of the practice. It will be remembered, that in the foregoing pages it has been related that the monastery of Weirmouth, in the kingdom of Northumbria, was famous for the residence of John the arch-chanter, and other the most skilful musicians in Britain. It is therefore not improbable that symphoniatic music might have its rise there, and from thence it might have been disseminated among the common people inhabiting that part of the kingdom; nay, it is next to impossible that a practice so very delightful, and to a certain degree so easily attainable, could be confined within the walls of a cloister.

It is true, that the reasons above adduced will warrant nothing more than a bare conjecture that music in consonance had its rise in this island; but it may be worth considering whether any better evidence than that it was known and practised in England so early as the eighth century, can be produced to the contrary.

But without pursuing an enquiry touching the particular country where symphoniatic music had its rise, enough has been said to ascertain, within a few years, the time of its origin; it remains to account for the error of those writers who ascribe the invention of it to Guido.

Besides the application of the syllables *UT, RE, MI, FA, SOL, LA*, to the first six notes of the septenary, it is universally allowed, that he improved, if not invented the stave; and that if he was not the first who made use of points placed upon one or other of the lines to signify certain notes, he was the first that placed points in the spaces between the lines, and by the invention of the keys or cliffs, compressed as it were, the whole system of the double diapason into the narrow limits of a few lines.

After he had thus adjusted the stave, and had either invented or adopted, it matters not which, the method of notation by points instead of letters, it was but a consequence that the notation of music of more parts than one should be by points placed one under another: and as in his time, the respective notes contained in the several parts, being regulated by one common measure, viz., that of the feet or syllables to which they were to be sung, they stood in need of no other kind of discrimination than what arose from their different situations on the same stave, or on different staves, and, by consequence, the points

must have been placed in a vertical situation, and in opposition to each other; and this method of notation suggested for music of more than one part the name of Counterpoint, a term in the opinion of some favouring of the barbarity of the age in which it was invented, but which is too expressive of the idea intended to be conveyed by it to be quarrelled with.

What has been said above respecting the improvement of Guido, will furnish a rule for judging of the credibility of the assertion which it is here proposed to refute, namely, that he was the inventor of polyphonus or symphoniatic music, and lead to the source of that, which by this time, cannot but be thought an error. The writers who maintain this position, and they are not a few, have mistaken the sign for the thing signified, that is to say, Counterpoint, for Music in Consonance, the thing characterised by counterpoint. The fact in short is, that music in consonance was in use before Guido's time; he invented the method of notation, calculated to define it, called Counterpoint: this is the whole relating to the invention now under consideration that can be ascribed to him; and it must have been the effect of strange inattention that a different opinion has prevailed so long in the world.

Towards the end of the eighth century flourished *BEDE*, well known to the world by the epithet of *VENERABLE*. He was born about the year 672, and was educated in the monastery situate at Weirmouth, near the mouth of the river Tyne, in the bishopric of Durham. He studied with incredible diligence, and, in the opinion of the famous *Alcuin*, was, for learning, humility, and piety, a pattern for all other monks. He wrote an Ecclesiastical History of Britain, at the end whereof are some memoirs of his own life, from which it appears that he was very assiduous in acquiring a knowledge of music, and punctual in the performance of choral duty in the church of his monastery. He had the good fortune to be very intimately acquainted with some of the singers whom pope Agatho had sent into Britain to teach the method of singing, as it was practised at Rome; and was, in a word, one of the greatest men of his time. He died in the year 735. His works have been many times printed, and in the latter editions make eight volumes in folio; the last is that of Cologne, in 1688. The first volume contains a great number of small tracts on arithmetic, grammar, rhetoric, astronomy, chronology, music, the means of measuring time, and other subjects. On that of music, in particular, there is a tract intitled *De Musica Theorica*; and another, *De Musica Quadrata, Mensurata, seu Practica*.* It is said, that he had no fewer than six hundred pupils; and that *Alcuin*, the preceptor to Charlemagne, was one of them. There is a well written life of him in the *Biographia Britannica*, and an accurate catalogue of his works in the *Bibliotheca Britannico-Hibernica* of bishop Tanner.

NOTGERUS, or *NOTKER*, surnamed *LE BEGUE*, a monk of St. Gal, flourished about the year 845, under the emperor Lotharius, son of Lewis the Pious. Among other things, he is famed for his book *De*

modulationibus, credo quòd a Dacis et Norwagiensibus qui partes illas insuæ frequentius occupare ac diutius obtinere solebant, sicut loquendi affinitatem, sic canendi proprietatem contraxerunt. Cambrie Descriptio cap. xlii.

* Vide Tan. Biblioth. pag. 89, in not. col. li.

Musica et Symphonia. He is supposed to have been the inventor of the *Sequentiæ*, which are those parts of the office in which the people answer to the priest, and which pope Nicolas I. ordained to be sung at mass. He died in 912. Innocent III. had taken order for his canonization, but his design was never carried into execution. There was another of the name, bishop of Liege: Trithemius has confounded them together.

RABANUS MAURUS, is reckoned in the number of those who have written on music. He was born at Mentz, in 788, and bred up in the monastery of Fulda. He studied at Tours, under Alcuin, and returning to his monastery, was chosen abbot thereof, in 822. Having enjoyed that dignity twenty years, he laid it down to please the monks, who said he applied himself too much to study, and too little to the affairs of the monastery. He retired to Mount St. Pierre; and was at last chosen archbishop of Mentz, in 847. In a treatise of the universe, consisting of twenty-two books, which he wrote and sent to Lewis le Debonnaire,* he has comprised an infinite number of common places, amongst which, it is supposed, are many relating to music, since Brossard has ranked him in his second class of writers on that subject. In a commentary of his upon the liturgy, he expatiates on the sacrifice, as it is called of the mass,† which latter word he supposes to be derived from the 'Ite missa est.' Go, ye are dismissed, the form used for the dismissal of the catechumens, and to signify that the service was ended.

WALAFRIDUS STRABO, so surnamed because he squinted, was first a monk of Fulda, and afterwards abbot of Richenou, in the diocese of Constance. He is reckoned among the musical writers, and had been a disciple of Rabanus Maurus. He flourished about the year 842, and wrote *De Officiis Divinis*, the twenty-fifth chapter of which tract is intitled *De Hymnis & Cantilenis eorumque incrementis, &c.*‡ The Benedictines, compilers of the *Histoire Littéraire de la France*, have discovered that there was another of his name, dean of the abbey of St. Gal, in the preceding century, with whom he is often confounded. *Hist. Lit. de la France*, tom. IV. pag. 59, in not.

BRISTAN, or BRIOSTAN, a native of England, a Benedictine monk, and precentor in the monastery of Croyland, is celebrated by Pits as an excellent mathematician, poet, and musician.§ *Ingulphus*, pag.

* Du Pin. *Nouv. Biblioth. des Auteurs Eccles. siec. ix.*

† As the word *Mass* will frequently occur in the course of this work, the following note of the translator of Du Pin's *Bibliothèque*, vol. VI. pag. 3, may serve for an explanation of that rite:—

"The word *Missæ*, or *Mass*, is an old Latin word, and signifies generally the whole service of the church, but more especially the holy sacrament of Christ's body and blood. It was called *Missæ*, or *Dimissio*, because no man was suffered to remain in the church that could not or would not receive the sacrament; and therefore such persons as had a mind to see and hear, but not receive, were all, without exception, dismissed by the deacon, after the sermon was ended, with these words, 'Ite, missæ est; Go, ye are dismissed;' and if any delayed, they were urged to depart by the deacon and exorcists, saying aloud, 'Si quis non communicet det locum; Whoever will not receive, let him go out.' The Roman church puts a different sense upon this word *Massæ*, understanding by it that solemn service wherein they do pretend to offer unto God the body and blood of his Son, as a propitiatory sacrifice for the sins, both of the quick and dead. Isidore here takes it in the first sense, calling it *Ordo Preicum*, i. e. the Form of Prayers. But Du Pin, by joining it with the word *Canon*, (a word of a much later use, and which signifies, in the Roman church, the rule or form of celebrating their mass) seems to bring it over to the latter, but against the sense of St. Isidore of Seville."

‡ Vide Du Pin. *Biblioth. cent. ix. cap. xiii.*

§ Pits. *De Reb. Angl. pag. 167. Tann. 124.*

867, speaks thus of him: 'Bristanus, quondam cantor monasterii, musicus peritissimus et poeta facundissimus.' He lived about 870, at the time when, in one of the invasions of the Danes, his monastery was burned, and the monks slain: he had, however, the good fortune to escape, and composed certain elegiac verses, wherein he relates the cruelties exercised by the invaders, the sufferings of his brethren, and the misfortunes attending this disastrous event.

As it is proposed in this work to give an account as well of practical as theoretical musicians, there will need little apology for inserting in this place a few particulars of our own king ALFRED, who is celebrated by Bale, and other writers, for his skill in music, and his performance on the harp: that he was very sedulous in his endeavours to promote the study of music in his kingdom, we are told by Sir John Spelman, in his life of this great monarch, pag. 135; and particularly that he procured to be sent from France one Grimbald,|| a man very skilful in music, of a singular good life, great learning, and who besides was an excellent churchman. Sir John Spelman adds, that the king first came to the knowledge of this person by his courtesy, he having made very much of him in his childhood, at Rheims, when he was in his passage towards Rome.

Again, the same author relates, that among the rest of his attendants, he is noted, Solomon like, to have provided himself of musicians, not common, or such as knew but the practic part; but men skilful in the art itself, whose skill and service yet farther improved with his own instruction, and so ordered the manner of their service as best befitted the royalty of a king. *Spelm. Life of Alfred*, pag. 199.

That he himself was also a considerable proficient on the harp, were other evidences wanting, the well-known story related by Ingulphus, William of Malmesbury, and succeeding historians, of his entering the Danish camp, disguised like a harper or minstrel, is a proof.

The substance of which relation is, that being desirous to know the strength and circumstances of the Danish army, then in Somersetshire, he disguised himself like a minstrel, and taking with him a harp, and one only confidant, he went into the Danish camp, the privilege of his disguise intitling him to free admittance every where, even into the king's tent; and there, for many days, he so employed himself as that, while he entertained his enemies with his mirth and music, he obtained the fullest satisfaction touching their ability to resist the attack on them, which he had for some time been meditating. This was in the year 378.¶

|| Of this Grimbald very honourable mention is made in the *Histoire de la France*, tom. V. pag. 694. Alfred had written to Eulke, archbishop of Rheims, intreating him to send to England a person skilled in the liberal sciences, particularly music. The archbishop wrote the king a long letter in answer, recommending Grimbald, a monk of St. Bertin, the person above mentioned. This was about the year 880: and had Grimbald been a much greater man than he was, the French would have been bound in gratitude to have spared him to us; for a few years before, they had from us Alcuin, the tutor of Charlemagne. It appears that Grimbald behaved very well whilst he was here. In the chronicle of Nic. Harpsfield are the heads of a speech of his, in a synod at London, before king Alfred and archbishop Æthelred, wherein he discoursed gravely and wisely of the primitive dignity of human nature, and of its corruption by the fall of Adam. The whole is said to be in the *Annals of Winchester*. Vide *Spelm. Life of Alfred*, pag. 135, in not.

¶ Vide *Spelman's Life of Alfred*, pag. 63.

tones, and concludes with general directions for antiphonal singing.

It is to be remarked, that all the tracts written about this time, which profess to teach the knowledge of music, and there are innumerable of them extant, begin, as this does, with directions for making and dividing the monochord: the reason of this is, that the method of ascertaining the places of the semitones in the diapason, by the syllables, was not then discovered; and hardly any instrument then in use, excepting the organ, would answer the end of impressing upon the memory of a child, the difference between the greater and lesser intervals; the teachers of music therefore invariably directed their pupils to find out the intervals themselves, and lay the foundation of their studies in the knowledge of the monochord.

SILVESTER, the second pope of that name, is justly celebrated as one of the great ornaments of the tenth century. He was a monk of Aurillac, in the province of Auvergne, a monastery which had been founded at the latter end of the preceding age. His pursuits were so various, and his excellence in all branches of learning so great, that it is difficult to say in what class of learned men he merits most to be placed; or whether we should consider him as a divine, a mathematician, or a philosopher at large. It is certain that he wrote upon geometry, particularly on the quadrature of the circle, on astronomy, logic, and rhetoric; that he was deeply skilled in the science of music, as a proof whereof it is said that he made some considerable improvements of the organ, on which he was an excellent proficient: William of Malmesbury speaks, with admiration, of an improvement made by him in the hydraulic organ.* He was born of obscure parents, in the neighbourhood of Aurillac: his name of baptism was Gerbert, or Girbirt: his great merit, and a disposition to communicate to the world the discoveries he made in the course of his studies, facilitated his promotion to the highest dignities of the church; for he was successively archbishop of Rheims and Ravenna, and at last pope. While he was archbishop of Rheims, he had the misfortune to see that city sustain a close siege, which obliged him to seek refuge in the court of the emperor Otho III. who had been his disciple. During his residence there, he invented an instrument for the measuring of time by the motion of the polar star, which some writers have confounded with the astrolabe. By the interest of his patron Otho, in the year 998, he was promoted to the archbishopric of Ravenna, and the following year to the papacy on the death of Gregory V., which he held but four years, for he died in 1003.

Mosheim has bestowed an eulogium on Gerbert as characteristic of the age in which he lived, as of the person he means to celebrate. He relates that he derived his learning in a great measure from the Arabians, among whom at that time there were many

very considerable men; though it is remarkable that we meet with the name of but one writer on music of that country, viz., Alfarabius, who is barely mentioned in a note in the life of Hai Ebn Yokdhan, an ingenious fiction translated from the original Arabic by Simon Ockley, 8vo. 1708. A treatise of his on music is referred to in the *Margarita Philosophica* of Gregorius Reischius, printed at Basil in 1517. Mosheim speaks thus of the state of learning in Gerbert's time:—

'It was not however to the fecundity of his genius alone that Gerbert was indebted for the knowledge with which he now began to enlighten the European provinces; he had derived a part of his erudition, particularly in physic, mathematics, and philosophy, from the writings and instructions of the Arabians, who were settled in Spain. Thither he had repaired in pursuit of knowledge, and had spent some time in the seminaries of learning at Cordova and Seville, with a view to hear the Arabian doctors; and it was, perhaps, by his example, that the Europeans were directed and engaged to have recourse to this source of instruction in after times. For it is undeniably certain, that, from the time of Gerbert, such of the Europeans as were ambitious of making any considerable progress in physic, arithmetic, geometry, or philosophy, entertained the most eager and impatient desire of receiving instruction either from the academical lessons, or from the writings of the Arabian philosophers, who had founded schools in several parts of Spain and Italy. Hence it was that the most celebrated productions of these doctors were translated into Latin, their tenets and systems adopted with zeal in the European schools, and that numbers went over to Spain and Italy to receive instruction from the mouths of these famous teachers, which were supposed to utter nothing but the deepest mysteries of wisdom and knowledge. However excessive this veneration for the Arabian doctors may have been, it must be owned nevertheless that all the knowledge, whether of physic, astronomy, philosophy, or mathematics, which flourished in Europe from the tenth century, was originally derived from them, and that the Spanish Saracens in a more particular manner may be looked upon as the fathers of European philosophy.' Mosh. *Eccles. Hist.* vol II. pag. 199.

The diligence with which Gerbert pursued his studies, and his proficiency in so many various branches of learning, raised in the vulgar a suspicion of his being addicted to magic, which Platina has without hesitation adopted; for he says he obtained the papacy by ill arts, and that he left his monastery to follow the devil. He however allows him the merit of a sincere repentance, but mentions some prodigies at his death, which few can believe on the authority of such a writer. Naudæus has written a justification of a great number of learned men who have undergone the same censure, and has included Silvester among them; but long before his time a certain poet had done him that good office in the following epigram:—

* Said to have been played on by warm water. See the *History of the Manual Arts*, by Dr. Thomas Powell, octavo, 1661, abridged in *Oldys's British Librarian*, No. I. pag. 51.

Ne mirare Magum fatui quod inertia vulgi
 Me (veri minime gnara) fuisse putat.
 Archimedis studium quod eram sophiæque sequutus
 Tum, cum magna fuit gloria scire nihil.
 Credebant Magicum esse rudes, sed busta loquuntur
 Quam pius, integer & religiosus eram.

The following epitaph bespeaks his character, and is an epitome of his history :—

Iste locus mundi Silvestri membra sepulti
 Venturo Domino conferet ad sonitum.
 Quem dederat mundo celebrem doctissima virgo.
 Atque caput mundi culmina Romulea.
 Primus Gerbertus meruit Francigena sede
 Remensis populi metropolim patriæ.
 Inde Ravennatis meruit conscondere summum
 Ecclesiæ regimen nobile, sicque potens
 Post annum Romam mutato nomine sumsit,
 Ut toto pastor fieret orbe novus.
 Cui nimum placuit sociali mente fidelis.
 Obtulit hoc Cæsar tertius Otho sibi.
 Tempus uterque comit clara virtute sophiæ ;
 Gaudet, et omne seculum frangitur omne reum
 Clavigeri instar erat cælorum sede potitus,
 Terna suffectus cui vice pastor erat.
 Iste vicem Petri postquam suscepit, abegit
 Lustrali spatio sæcula morte sui.
 Obliguit mundus discussa pace triumphus
 Ecclesiæ mutans, deditit requiem.
 Sergius hunc loculum miti pietate sacerdos,
 Successorque suus comisit amore sui.
 Quisquis ad hunc tumulum devexa lumina vertis,
 Omnipotens Domine, dic, misere sui.

BERNO, abbot of Richenou, in the diocese of Constance, who flourished about the year 1008, is celebrated as a poet, rhetor, musician, philosopher, and divine. He was the author of several treatises on music, particularly of one *De Instrumentis Musicalibus*, beginning with the words 'Musicam non esse contempnendum!' which he dedicated to Aribon, archbishop of Mentz. He also wrote *De Mensura Monochordi*: but the most celebrated of his works is a treatise *De Musica seu Tonis*, which he wrote and dedicated to *Petrinus*, archbishop of Cologne, beginning 'Vero mundi isti advenæ et Peregrino:' this latter tract is part of the *Baliol* manuscript, and follows the *Enchiridion* of Odo, above referred to: it contains a summary of the doctrines delivered by Boetius, an explanation of the ecclesiastical tones, intermixed with frequent exhortations to piety, and the application of music to religious purposes. He was highly favoured by the emperor Henry II. for his great learning and piety, and succeeded so well in his endeavours to promote learning, that his abbey of Richenou was as famous in his time as those of St. Gal and Cluni, then the most celebrated in France. He died in 1048, and was interred in the church of his monastery, which but a short time before he had dedicated to St. Mark.

From the account hereinbefore given of the rise and progress of choral service, and of the institution of the ecclesiastical tones, modes, tropes, or whatever else they may be termed, it is clear that before the eleventh century they were in number eight, besides which, the actual existence at this day of manuscripts, such as those of Aurelianus, Odo of Cluni, and this of

Berno above-mentioned, in which not only eight tones are spoken of, but a formula of each is given in words at length, are indisputable evidence of the fact. A learned gentleman, Dr. King, the author of a book lately published, intitled the *Rites and Ceremonies of the Greek Church in Russia*, has intimated, pag. 43, that the addition of the four plagal tones, as they are called, to the four authentic of St. Ambrose, is by some ascribed to Guido Aretinus, who, by the way, in his *Micrologus* lays not the least claim to this improvement, but speaks of the eight ecclesiastical tones as an ancient establishment. We are therefore necessitated to conclude that the contrary opinion is without foundation, and the rather, as no writer of authority among the many that have been consulted in the course of this work, has intimated the least doubt but that the *Cantus Gregorianus* consisted of eight tones.

Through all the variations that attended music, the ancient system of a *bisdiapason*, constituted of tetrachords, retained its authority; we do not find that even in the time of Boetius the system itself had received any alteration; the Latins it is true had rejected the ancient Greek characters, and introduced the Roman capital letters in their stead; and pope Gregory reduced those letters to the first seven of the Roman alphabet, which, by repeating them in each septenary, he made to serve the purpose of a great number, calling the first series graves, the second acutes, and the third, distinguished by double small letters, super-acutes; but the tetrachord system, said to be immutable, as also the Greek names anciently appropriated to the several chords, continued in use till the close of the tenth century, soon after which such a reformation of the ancient scale was made, as was thought worthy of commemoration, not only by chronologers, but by the gravest historians. The person to whose ingenuity and industry we owe this inestimable improvement was an ecclesiastic, GUIDO ARETINUS, a Benedictine monk. The relation given by Cardinal Baronius of this event is to the following effect; viz: That in the pontificate of Benedict VIII. Guido Aretinus, a monk, and an excellent musician, to the admiration of all, invented a method of teaching music, so that a boy in a few months* might learn what no man, though of great ingenuity, could before that attain in several years.—That the fame of this invention procured him the favour of the pope, who invited him to Rome, as did afterwards John XX. his successor.—That in the thirty-fourth year of his age he composed a treatise, which he called *Micrologus*, and dedicated to Theodald, bishop of Arezzo. *Annal. Eccl. tom. XI. pag. 73, et seq.*

To this account Baronius has subjoined the epistle from Guido to a friend of his, Michael of Pomposa, beginning 'Clarissimo atque dulcissimo fratri Michaëli,' containing the history of his invention, and of his invitation to Rome and reception by the pope; the particulars whereof are referred to an extract from the epistle itself, which is given in a subsequent

* Guido in the prologue to the *Micrologus* says, in the space of one month, 'unius mensis spatium.'

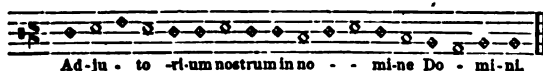
page of this work.* General accounts of the reformation of the scale made by Guido are to be met with in almost every treatise on the subject composed since his time; yet among these some improvements are attributed to him, as namely the invention of the stave, and of the figure of a hand, to explain his method of notation, to the merit whereof, if we are to judge from his own writings, he does not appear to have made the least claim.

It has been related that the method of notation among the Greeks was by the letters of their alphabet, as also that the Latins in their stead made use of the Roman capital letters, A, B, C, D, E, F, G, and so on to P, as is mentioned by Boetius in his fourth book; and that afterwards Gregory rejected all but the first seven, which he made to serve for the whole scale, distinguishing the grave series by the capitals and the acute by the small letters. Their manner of singing was from A to B, a tone; from B to C, a semitone; from C to D, a tone; from D to E, a tone; from E to F, a semitone; from F to G, a tone; so that, to speak of the diapason only, the seven capital letters served to express, ascending and descending, either gradually or by leaps, the seven notes;† but so difficult was it according to this method to know and to hit precisely the place of the two semitones, that before the pupils were able to acquire a knowledge of the Canto Fermo, ten years were usually consumed. Guido studied with great diligence to remove this obstruction; and the current account of this invention is, that being at vespers, and singing the hymn to St. John, 'Ut queant laxis,' it by chance came into his head to apply, as being of easy pronunciation, certain syllables of that hymn to as many sounds in a regular succession, and thereby

* By the epistle above referred to, it appears, that Baronius has been guilty of an error in saying that Guido was invited to Rome both by Benedict and John; for it was from John only that he received this mark of favour. Neither does he clearly distinguish between the *Argumentum novi Cantus invenendi* and the *Micrologus*; the former contained his method of singing by the syllables, and procured him a general reputation, and the favour of Benedict; the latter, his reformation of the scale, and, as Guido himself expressly says, was composed in the thirty-fourth year of his age, John XX. being then pope. Besides this, he adds, that the *Micrologus* was written at the monastery of Pomposa, whither he retired not, till after his interview with the pope.

† Zarlino has been guilty of a gross mistake in asserting, as he does in his *Instrumenti*, part ii. chap. 30. that Guido first made use of the method of notation by the capital and small Roman letters: the current opinion is, that Gregory introduced it; but supposing that matter doubtful, there is sufficient evidence to prove that the practice in question prevailed before Guido's time; for the *Enchiridion* of Odo, abbot of Cluni, contains directions for dividing the monochord, and marking the first septenary with the capital, and the second with the small Roman letters; and Vincentio Galilei, in his *Dialogo della Musica*, pag. 96, has given the following specimen of Canto Fermo:—

d c h c d e d c h a h c d a G F G G
Slt nomen Do - mi - ni be-ne-dictum in sœ - cu-la
F G A G F F G F F E F G F E D C D D
Adju - to - rium nostrum in no - mine Do - mi-ni



which he asserts was composed many years before Guido was born.

The perusal of the *Enchiridion* of Odo has furnished the means of refuting a vulgar error, namely, that Guido, to perpetuate the memory of his reformation of the scale, prefixed to it the Greek Γ, the initial letter of his name; the contrary of this is manifest in the directions of Odo for dividing the monochord, in which he assumes that very character.

he removed those difficulties that had a long time retarded the improvements of practical music.

UT queant laxis REsonare fibris
MIRA gestorum FAMuli tuorum
SOLve polluti LABii reatum.

Sancte Joannes.‡

This is the substance of what is related by Gaffurius, Glareanus, Vicentino, Galilei, Zarlino, Kircher, Mersennus, Bontempi, and other writers, touching the invention of the syllables; but the scale, as it stood in the time of Guido, was not adapted for the reception of six syllables, and therefore the application which he made of them does necessarily imply some previous improvement of the scale, either actually made by him, or which he had at that time under consideration. It is pretty certain that this improvement could be no other than the converting the ancient tetrachords into hexachords, which, to begin with the tetrachord Hypaton, he effected in this manner: that tetrachord was terminated in the grave by Hypate hypaton, or H_1 ; for though the *Proslambanomenos* A, carried the system a tone lower, it was always considered, as its name imports to be, *acquisitus*, supernumerary, or redundant; the addition therefore of a tone below A immediately converted the tetrachord Hypaton into a hexachord, and drove the semitone into a situation that divided the hexachord into two equal parts. To this additional tone Guido, as some say, in honour of the Greeks, the fathers of music, or, as others suggest, to perpetuate the memory of his invention, and thereby acquire honour to himself, affixed the Greek gamma Γ, which fortunately for such a supposition, was the initial letter of his name.§

By this constitution the position of the semitone was clearly pointed out to every theorist; but the thing in pursuit was a method of hitting it in practice, the want whereof rendered the singing extempore so very difficult, that few could attain to it without great labour; but the accidental hearing of the hymn above-mentioned suggested to Guido a thought that the six syllables therein contained might be so fitted to the six sounds in his newly-formed hexachord, as to furnish a rule for this purpose; accordingly he

‡ The words of the above hymn were composed by Paulus Diaconus, Paul, a deacon of the church of Aquileia, about the year 770, and in the reign of Charlemagne, as Possevin relates. Dr. Wallis, from Alstedius, in the room of Adonic, Sancte Joannes, has inserted O Pater Alme. Brossard, and others after him say, that Angelo Berardi has very prettily comprised the six syllables in this line.

§ Ut azevet miserum fatum solitumque labores.
But Gerard Vossius, *De quatuor Artibus Popularibus*, pag. 93, without taking notice of Berardi, says it is only part of the following verse composed by some person who lived after Guido:—

Cur adhuc tristis numeros cantumque labori?
Ut azevet miserum fatum solitumque labores.

¶ Melomius denies that Guido extended the ancient Greek system either upwards or downwards, or that he even made any addition to the tetrachord Hypaton; for he asserts, with an unwarrantable degree of confidence, that though the *Proslambanomenos* was generally understood as the lowest sound in the ancient system, yet that the Greeks in truth recognized another, which was a tone below it, but that as it prolated a confused and undistinguishable sound, it was neglected. He says that when Guido determined to reassume this tone, he was necessitated to mark it with the Grecian gamma, Γ; for that otherwise, as he has given the Latin G to its diapason *Lychnos meson*, he must either have introduced a strange character, or doubled the letter G, which latter method could not please him so well. Melomius also says that the Greek system proceeded even farther in the acutes than that of Guido; but the truth of this assertion will be best judged of by a comparison of the ancient system with that of Guido, as they stand opposed to each other in a subsequent page of this volume.

made the experiment, and applying the syllable *ut* to the first note of the hexachord, and the rest to the others in succession, he gave to every note an articulate sound.

The view of Guido in this contrivance was to impress upon the minds of learners an idea of the powers of the several sounds, as they stood related to the first sound in the hexachord; for he saw that from an habitual application of the syllables to their respective notes, it must follow that the former would become a common measure for the five intervals included within the limits of the hexachord, and that in a short time the idea of association between the syllables and the notes would become so strong as to make it almost impossible to misapply them.

Finding that this invention was likely to succeed, he added two tones to the tetrachord *Meson*, thereby making that also a hexachord, and to this also he applied the syllables.

Lastly, he made a like addition of two tones to the tetrachord *Synemmenon*, and thereby formed a third hexachord.

The several combinations and conjunctions of these tetrachords for the purpose of ascertaining the intervals in any given system, exceeding the limits of the hexachord, will be hereafter explained; the result of the invention was clearly this, that in a regular succession of six sounds in their natural order, beginning either from *F*, from *C*, or from *F*, taking in *B b*, the progression with respect to the tones and semitone in each was precisely the same: and supposing the learner to have acquired by constant practice a habit of expressing with his voice the interval *G C*, which is an exact fourth, by the syllables *ut fa*, the two sounds proper to the interval *G C* would become a kind of tune, which he must necessarily apply to *ut fa*, wherever those syllables should occur; and in what other situation they occur the above constitution of the different hexachords shows; for as in the hexachord from *G* to *E* the syllables *ut fa* express the fourth *G C*, so in that from *C* to *A* do they express a fourth *C F*, and in the hexachord from *F* to *D* the fourth *F B b*.

The introduction of *B b* to avoid the Tritonus has been related at large; and here it may be proper to add that the exceeding discordancy or hardness of *B ♯*, when taken as a fourth, gave occasion to the epithet *soft*, which for the sake of distinction was given to *B b*; for this reason the hexachord from *F* is called the *molle* or *soft* hexachord, as that from *G* is called *durum* or *hard*; these appellatives bagot another, namely, that of the natural hexachord, which is given to the hexachord from *C*. The method of singing each is termed a *property* in singing, and is thus described in the following distich:—

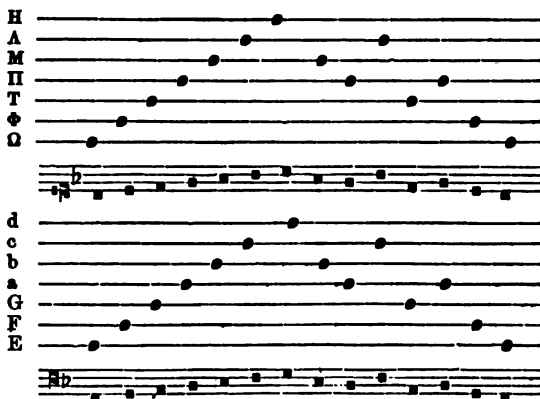
C Naturum dat, *f b* molle nunc tibi signat,
g quoque *b durum* tu semper habes caniturum.*

The intervals thus adjusted in the several hexachords, became alike commensurable in each by the syllables; and *ut mi* would as truly express the ditone *C E* or *F A* as *G B*, to which they were originally adapted: the same may be said of every

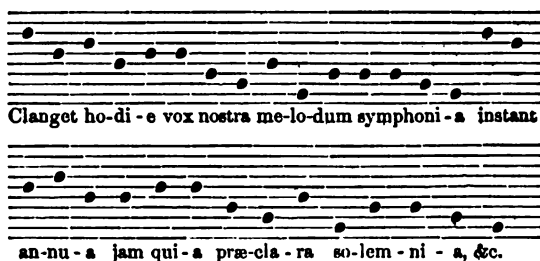
other interval in each of the hexachords, and their exact uniformity is visible in this, that the semitone has the same situation in them all, and divides them into two equal parts.

CHAP. XXXV.

THE writers on music, as has been mentioned above, have also attributed to Guido another very considerable improvement of the musical scale, which they suppose to be coeval with the formation of the hexachords, namely, the *Stave*, consisting of parallel lines in a horizontal position, such as is now used in the writing of music: in this they seem to have been mistaken, for all the examples made use of by him to illustrate his doctrine, are given in the Roman capital and small letters, agreeably to the method of St. Gregory. Besides which it is demonstrable that the stave was of a much earlier invention than this opinion supposes. The proof of this assertion is to be found in the *Dialogo della Musica* of Vincentio Galilei, pag. 37, which contains a diagram of musical punctuation on a stave consisting of no less than seven lines, which he says was in use long before the time of Guido.†

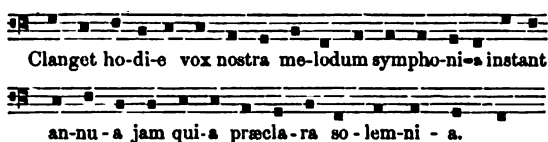


And immediately after he exhibits an example of notation on a stave of ten lines, concerning which he thus expresses himself: 'Eccovi l' essemplio d' una 'Cantilena tra le altre, che mi sono capitate in mano, 'la quale mi fu gia da un gentiluomo nostro Fiorentino donata, ritrovata da lui in un antichissimo suo 'libro: ed è delle pui intere, è meglio conservata d' 'altra che io abbia mai veduta.'



† By an unaccountable accident the examples here referred to, are in some copies of Galilei's book defective, as giving only the stave, and not the points; but they are here supplied from Martini, who has rendered them into the characters of modern notation. Vid. *Stor. della Musica*, pag. 185.

* Morley in the Annotations on Book I, of his Introduction to Practical Musick.



To these examples of lineal punctuation another may be adduced from the *Musurgia*, tome I. pag. 213, wherein the points are placed on a staff of eight lines. We owe this discovery to Kircher, who relates that being on a voyage to Malta he went to visit the library of S. Salvator in Messina, which is well furnished with Greek manuscripts; and that one of the monks there produced to him a manuscript book of hymns, which had been written about seven hundred years, in which was contained the following:—



Παρθένε ἡμέγα χαρίθω δόξα δωδὲς αἰών ὡς μητὲρ ἀπομο σύνθη

Kircher mentions that while he was writing the *Musurgia*, he received from a friend of his, the reverend abbot Didacus De Franchis, an extract from a very ancient antiphonary in the monastery of Vallombrosa, containing an example of interlineary punctuation in the following form:—



In which he says the points correspond with the notes of a well-known antiphon, beginning with the words 'Salve Regina.'

These evidences sufficiently prove that the staff is more ancient than is generally supposed; for it is agreed that the *Micrologus* was written between the years 1020 and 1030; and a period of seven hundred years before the publication of the *Musurgia*, in 1650, will carry the use of the staff back to the year 950, which is more than forty years before Guido was born, and show the error of those who ascribe the invention of the staff to him.

Indeed Guido has intimated that in his method of notation, points may be placed as well in the spaces as on the lines; and for this, as also for the consequent reduction of the staff from eight to five, or rather, for the purpose of ecclesiastical notation, to four lines, posterity are undoubtedly obliged to him.

It will be remembered that the ancient Greek scale was composed of tetrachords, and that it exhibits a succession of chords from *Proslambanomenos*, or A, to *Nete hyperboleon*, or aa. As to the *Proslambanomenos*, it was termed *Acquisitus* or *Assumed*, and therefore made no part of the tetrachord *Hypaton*. In prosecution of his scheme of converting the tetrachords into hexachords, with respect to the lowest tetrachord in the scale, Guido had nothing more to do than to add to it a single chord, to

which he affixed the Greek letter Γ, and this he termed the *durum hexachord*, to distinguish it from that other beginning at F, in which B is flat, and which therefore is called the *molle hexachord*: but of this, and also of the natural hexachord beginning at C, mention is made before.

The hexachords, constituted in the manner above described, with the additional improvement of the staff, and before they were incorporated into the scale assumed the following form:—

DURUM HEXACHORD.



NATURAL HEXACHORD.



MOLLE HEXACHORD.



The power or situation in the scale, of each of these points, is signified by the letters respectively placed above them: but the intention of the staff was to supersede the literal scheme of notation; it may therefore be said, supposing the letters away, that each hexachord is but a repetition of the other two, and that the power of each point in all the three is similar: but the case is far otherwise; for by a contrivance, which shows the admirable sagacity of the inventor, the staff of four lines is rendered capable of expressing every one of the three different hexachords which the reformed musical scale requires.

To manifest this diversity Guido invented certain characters called *Cliffs*, in number three, whereof the first was Γ, the other two were the letters C and F: the first of these indicated a progression of sounds from the lowest note in the scale upwards to E: the second denotes a series from C to A, and the third another series from F through Bb to D: these cliffs, which were also termed *claves* or *keys*, were placed by Guido on the lower line at the head of his staff. It is evident from hence, that by the application of the characters Γ, C, F, the power of the six points used to denote the hexachord, were, without the least change of their situation in respect of the staff, made capable of a threefold variety, and consequently required different denominations.

That Guido invented some method for ascertaining the initial chords of each of the hexachords is certain, but that he made use of the letters, or cliffs, Γ, C, F, for that purpose, is rather conjecture than fact. Indeed the contrary seems to be clear from his own words, and that his method of discriminating the hexachords was not by the cliffs, but by making

those lines of the stave, which were their proper stations, of a different colour from the rest. In the *Micrologus* we meet with these verses :—

Quasdam lines signamus variis coloribus
Ut quo loco sit sonus mox discernat oculus ;
Ordine tertiæ vocis splendens crocus radiat,
Sexta ejus, sed affinis flavo rubet minio.

To understand which, it is necessary to observe that the third and sixth notes here mentioned are the third and sixth from A ; for *Γ*, as has been frequently said, was an assumed chord : *Hypo-Proslambanomenos* is the appellation given to it even by modern musicians, and for some ages after its introduction it was not in strictness considered as part of the scale. That this is Guido's meaning is clear from the following passage in the *Micrologus* : 'We make use of two colours, viz., yellow and red, which furnish a very useful rule for finding the tone and letter of the monochord to which every Neuma and note belongs. There are seven letters in the monochord, and wheresoever you see yellow it is the third, and wherever red it is the sixth letter.' The third and sixth letters here mentioned are most evidently the third and sixth from A, the first of the seven letters on the monochord, that is to say C and F, which are the stations of two of the cliffs ; and the above citations incontestably prove that to indicate the key of C, Guido made use of a yellow, and for that of F, a red line.*

Hitherto we have considered the hexachords as the integral parts of Guido's system, and as independent of each other ; but their use, and indeed the ingenuity and excellence of his invention, can only be discerned in that methodical arrangement of them by means whereof they are made to coincide with the great or immutable system : this, as has been shewn, was comprehended in the *Hypaton*, *Meson*, *Diezeugmenon*, and *Hyperboleon* tetrachords ; for the tetrachord to which they gave the name *Synemmenon* was merely auxiliary, as being suited to that kind of progression only, which leads through what we now call *b flat*. The system of Guido, supposing it to terminate as that of the ancients did at *aa*, and exclusive of the chord *Γ* added by him, to contain the *bisdiapason*, includes five hexachords differently constituted, the *molle* hexachord being auxiliary, and answering to the tetrachord *synemmenon*, which five hexachords respectively have their commencement from *Γ*, from C, from F, from G, and from C : but he found it capable of extension, and by adding four chords above *aa*, and a consequent repetition of the *molle* and *durum* hexachords from *f* and from *g*, he carried it up to *ee*, beyond which it was so seldom extended, as to give occasion to a proverbial exclamation, by which even at this day we reprehend the use of hyperbolic modes of speech, viz., 'that was a note above *e la*.' By this addition of chords the hexachords were increased to seven, that is to say, so many as are necessary for the conjugation of the system included within *Γ* and *ee*.

But between the tetrachords of the ancients, and the hexachords of Guido, this difference is most ap-

parent : the former were simply measures of the *diatessaron* system ; they succeeded each other in an orderly progression through the whole *bisdiapason* : the hexachord is also, at least in the opinion of the moderns, the measure of a system ; but their collateral situation, and the being made as it were to grow the one out of the other, varies the nature of their progression, and points out, in the compass of twenty-two notes, seven gradations or deductions, for so they are termed by the monkish writers, of six notes, each beginning at a different place in the diapason, and yet in all other respects precisely the same. Add to this that the hexachords with the syllables thus adapted to them, become as it were, so many different conjugations, by which we are able to measure and try the musical truth of the several intervals of which they are composed.

The chords contained in the enlarged system of Guido, are twenty-two in number, reckoning *b* in the acutes, and *bb* in the super-acutes : otherwise in strictness they are but twenty, seeing that *b* and *h* can never occur in one and the same hexachord : for the designation of them two staves of five lines each are necessary ; and in that conjoint position which the ascending scale requires, the hexachords will have this appearance :—†

† The representations of Guido's system are many and various ; for he not having exhibited it by way of diagram, succeeding writers have thought themselves at liberty to exercise their several inventions in schemes and figures to explain it. Franchinus, and others after him, have enclosed each column of syllables, as they apply to *Γ*, and the letters above it, in two parallel lines, with a point at bottom, exactly like an organ pipe ; but as there is not the least analogy to warrant this form, others have rejected it. Peter Aron and others have placed the hexachords in a collateral situation, resembling the tables of the decalogue. Bontempo makes use of the following scheme of the hexachords to represent their mutations, and dependence on each other. *Hist. Mus.* pag. 183 :—

1536	ee	-	-	-	-	-	-	-	la
1738	dd	-	-	-	-	-	-	-	la sol
1944	cc	-	-	-	-	-	-	-	sol fa
2048	bb	-	-	-	-	-	-	-	mi
2187	bb	-	-	-	-	-	-	-	fa
2304	aa	-	-	-	-	-	-	-	la mi re
2592	g	-	-	-	-	-	-	-	sol re ut
2916	f	-	-	-	-	-	-	-	fa ut
3072	e	-	-	-	-	-	-	-	la mi
3456	d	-	-	-	-	-	-	-	la sol re
3888	c	-	-	-	-	-	-	-	sol fa ut
4096	b	-	-	-	-	-	-	-	mi
4374	b	-	-	-	-	-	-	-	fa
4608	a	-	-	-	-	-	-	-	la mi re
5184	G	-	-	-	-	-	-	-	sol re ut
5832	F	-	-	-	-	-	-	-	fa ut
6144	E	-	-	-	-	-	-	-	la mi
6912	D	-	-	-	-	-	-	-	sol re
7776	C	-	-	-	-	-	-	-	fa ut
8192	B	-	-	-	-	-	-	-	mi
9216	A	-	-	-	-	-	-	-	re
10368	Γ	-	-	-	-	-	-	-	ut

It may seem strange, as Guido has characterised the *durum* hexachord by the key *Γ*, that that of *F* should be the first that occurs in the scale ; but the reason of this is, that the placing of *F* on the fourth line of the stave, does as much determine the series as *Γ* on the first would have done : the same reason may serve for postponing the cliff C to *F*. As to *g*, it occurs as soon as is necessary, and not before ; and here it may be remarked that *g* is situated on the third line above C, as C is on the third line above *F*. Farther, a stave of five lines, with the cliff *F* on the fourth, is supposed to signify the five lower lines of the scale. One with C on the third, the five above *F* inclusive, and one with *g* on the second, the five above C. All this will most clearly appear from the two foregoing schemes, which exhibit an example of ingenuity and sagacity that has stood the test of ages, and is worthy the admiration of all men.

Many have thought Guido's scheme defective in that it gives no syllable to *F*. Dr. Wallis was of this opinion, and says what a wonder it is that he did not apply to it the syllable *sa*, from the first word of the Adonic verse Sanctus JOANNES ! Mersennus, *Harmonie Universelle*, pag. 183, seems to have thought much in the same manner, by his adding the syllable *si*, which is used by the French at this day. The original introduction of this syllable is by him and other writers attributed to one Le Maire, a French musician, who says he laboured for thirty years in vain to bring it into practice ; but that he was no sooner dead than all the musicians of his country made use of it. Notwithstanding which

* See an example of this kind in a subsequent page of this book.

The diagram illustrates the structure of hexachords in medieval music theory. It features two staves. The top staff shows a sequence of notes: c, d, e, f, gg, aa, bb, hh, cc, dd, ee. Below this, a series of hexachords are defined: G A B C D E F, g a b b, and Natural Hexachord. The bottom staff shows the corresponding solfège syllables: Ut Re Mi Fa Sol La. The diagram also includes labels for 'Durum Hexachord' and 'Molle Hexachord'.

The above scheme is intended to shew the situation of the notes on the lines and spaces, and the relation which the hexachords bear each to the others: another compounded of two schemes, the one of Bontempi, and the other of Doctor Wallis, contains the reformed scale of Guido in a collateral situation with that of the ancients. (See Appendix, No. 56.)

To the lower chord the moderns have given the name *Hypo-Proslambanomenos*; the number assigned to it may, by the rule herein before given, be easily

the general opinion is that the syllable *si* was introduced into the scale by *Éricius Puteanus* of Dort, who lived about the year 1580, and wrote a treatise on music entitled *Musæthema*.

This is in substance the account which *Mons. Brossard* has given of the introduction of the syllable *si*; but another writer, *Mons. Bourdelot*, has given a very different account of this matter; for he relates that about the year 1675 a certain *Cordelier* introduced the syllable *si* into the scale. He seems however to doubt the fact, as being founded only on tradition; and goes on to relate that the *abbé de la Louette*, master of the choir of the cathedral church of Paris, had assured him that the syllable in question was invented, or perhaps a second time brought into practice, by one *Metru*, a famous singing-master in Paris about the year 1676. *Bourdelot* adds that *Le Moine*, an excellent lutenist, of sixty years practice, had assured him that he knew *Metru* very well, and that he introduced the syllable *si*; and that he remembered also a *Cordelier* of the convent of *Ave Maria*, who had made some variation in the ancient scale about the latter end of the last century. For these reasons *Bonnet* inclines to think that the honour of the invention might be due to the *Cordelier*, but that the merit of reviving it is to be ascribed to *Metru*. But whichever of the above relations is true, it is pretty certain that both *Mersennus* and *Brossard* are mistaken in what they say respecting the invention of the syllable *si* by *Le Maire*.

The same author, *Bourdelot*, insinuates, that notwithstanding the use of the syllable *si* is much approved of by the French musicians, yet in Italy they disdain to make use of it, as being the invention of a Frenchman. *Histoire de la Musique et de ses Effets*, par *Bourdelot*, Amsterdam, 1725, tom. I. pag. 17.

It seems that the musicians of other countries have been aware of the necessity of a seventh syllable in order to get rid of the difficulties which the mutations, as they are called, are attended with in the practice of singing; for in the *Porque de la Musica* of *Andrea Lorente* of Alcala, published in 1673, we find the syllable *si* applied to *h* in the progression from C to c.

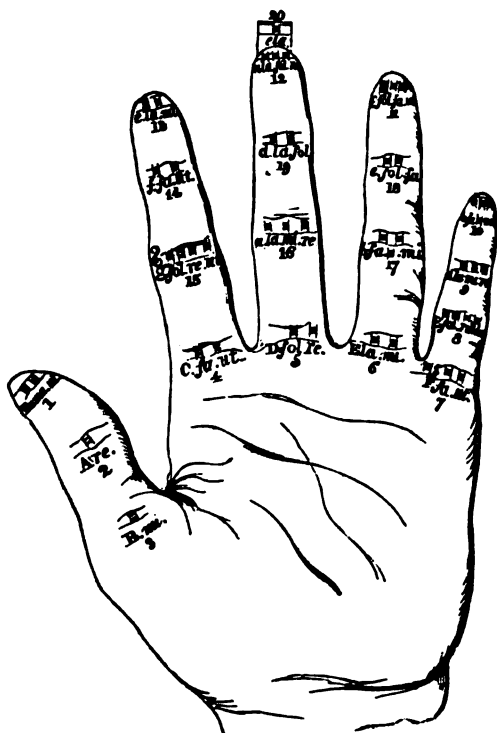
And here it may not be improper to observe, that the Italians at this day make use of the syllable *no* instead of *ut*, as being more easy of pronunciation: this variation may be traced back to the year 1678, and is to be found in a treatise herein before cited, entitled *Armonia Gregoriana*, written by *Gerolamo Cantone*, and printed at Turin in that year.

Mersennus, *Harm. Univers.* pag. 183, intimates that for expressing the semitone between A and B \flat , some of the musicians of his country made use of the syllable *za*, that of *si* being appropriated to B \natural ; but this distinction seems not to prevail at this day. *Mons. Loulie*, the author of *Elements ou Principes de Musique*, printed at Amsterdam, 1698, rejecting the syllable *za*, has retained only *si*; and this method of solmisation is practised throughout France.

found, it being nine of those parts of which 9216 is eight, and shews the ratio of Γ to A to be sesqui-octave, in the proportion of 9 to 8. The same rule will also suggest the means of bringing out the numbers proper to the notes added to the scale by Guido, which are those from aa upwards; for, to begin with bb, it is in a subduplicate ratio to b, its number therefore will be the half of 4374, that is to say 2187. The next note *h* having the same ratio to *h*, will in like manner require the subduplicate of 4096, which is 2048.

From the foregoing disposition of the tetrachords we learn the true names of the several sounds that compose the system; for it is observable that though in fact each septenary contained in it is but a repetition of the former, and that therefore the generical name of each chord is repeated, yet their specific differences in respect of situation are admirably distinguished by the different names assigned to each: thus, for instance, the lower chord is Γ UT, or GAMUT, but its replicate is for a very obvious reason termed g SOL RE UT; the replicates of A RE are a LA MI RE, those of C FA UT are c SOL FA UT and c SOL FA; those of D SOL RE, d LA SOL RE, and d LA SOL; and here it is to be remarked that as well the recision as the addition of a syllable expresses the situation of a note; for the last of the seven hexachords cuts off a syllable from the names of the three upper chords, leaving to the uppermost one only, e la, as may be seen in the example.

As a farther improvement of his system, and to facilitate the practice of solmisation, for so we are to call the conjugation of any given cantilena by means of the syllables UT, RE, MI, FA, SOL, LA, most authors relate that he made use of the left hand, calling the top of the thumb Γ , and applying the names of the rest of the notes to the joints of each finger, giving to the top of the middle finger, as being the highest situation, the note e LA, as in the following page is shewn:—



But to warrant this opinion there seems to be no better authority than bare tradition; for in no part of Guido's writings does the mention of the hand occur; nay, it seems from a passage in the manuscript of Waltham Holy Cross, herein before cited, that the hand was an invention posterior in time to that when Guido is supposed to have lived; * its use was to instruct boys in the names and respective situations of the notes of his scale; and for choosing the left hand rather than the right this notable reason is given, 'that it being nearest the heart, the instruction derived from thence is likely to make the deeper impression on the minds of learners.'

As to the precise time when he lived, authors are very much divided. Zaccone and others assert it to have been about the year of Christ 960; Baronius, that it was about 1022; Alstedius, and after him Bontempi, place him under pope Leo IX. and the emperor Henry III. in the year 1049; but Sigebert testifies that he flourished in the time of the emperor Conrad the younger, and that 1028 was the precise year when the reformation of Guido took place; and for this opinion we have also the authority of Trithemius.† But Guido has decided this question in a relation given by him of his invitation to Rome by John the XX., and he it is agreed began his pontificate in the year 1024.

CHAP. XXXVI.

SOME account of Guido is to be gathered from his writings, particularly an epistle from him to his

friend Michael, a monk of Pomposa, and the tract to which that is an introduction, entitled *Argumentum novi Cantus inveniendi*: from these, and some scattered passages to be met with in ancient manuscripts, the following memoirs are collected:—

He was a native of Arezzo, a city in Tuscany, and having been taught the practice of music in his youth, and probably retained as a chorister in the service of the Benedictine monastery founded in that city, he became a monk professed, and a brother of the order of St. Benedict: the state of learning was in those times very low, and the ecclesiastics had very few subjects for study, if we except theological controversy, church history, logic, and astrology, which was looked on by them as the most considerable of the mathematical sciences: these engaged the attention of such members of those fraternities as were endued with the most active, not to say contentious, spirits; while the exercises of devotion, the contemplating the lives of saints, and the qualifying themselves for the due discharge of the choral duty, employed those of a more ascetic and ingenuous turn of mind. Vossius makes Guido to have been at first a monk in the monastery of St. Leufred in Normandy; ‡ but this is by a mistake, which will be accounted for hereafter; so that the only places of his settlement, of which we can speak with certainty, are the Benedictine monastery of Arezzo, the city where he was born, and that of Pomposa in the duchy of Ferrara.

In this retirement he seems to have devoted himself to the study of music, particularly the system of the ancients, and above all to reform their method of notation. The difficulties that attended the instruction of youth in the church-offices were so great, that, as he himself says, ten years were generally consumed barely in acquiring the knowledge of the plain-song; and this consideration induced him to labour after some amendment, some method that might facilitate instruction, and enable those employed in the choral office to perform the duties of it in a correct and decent manner. If we may credit those legendary accounts that are extant in old monkish manuscripts, we should believe he was assisted in his pious intention by immediate communications from heaven: some speak of the invention of the syllables as the effect of inspiration; and Guido himself seem to have been of the same opinion, by his saying it was revealed to him by the Lord; or as some interpret his words, in a dream; but graver historians say, that being at vespers in the chapel of his monastery it happened that one of the offices appointed for that day was the above-mentioned hymn to St. John Baptist, written by Paulus Diaconus, and that the hearing thereof suggested this notable improvement.

We must suppose that the converting the tetrachords into hexachords had been the subject of frequent contemplation with Guido, and that a method of discriminating the tones and semitones was the one thing wanting to complete his invention. During the performance of the hymn he remarked the iteration of the words, and the frequent returns of UT, RE, MI, FA, SOL, LA: he observed likewise

* Kircher, in the *Musurgia*, tome I. pag. 115, says this expressly.

† De Viris illustr. ord. Bened. lib. II. cap. 74.

‡ De Scient. Mathem. cap. xxii. § 7.

M

a dissimilarity between the closeness of the syllable *m*, and the broad open sound of *ra*, which he thought could not fail to impress upon the mind a lasting idea of their congruity, and immediately conceived a thought of applying these six syllables to his new formed hexachord.

Struck with the discovery, he retired to his study, and having perfected his system, began to introduce it into practice: the persons to whom he communicated it were the brethren of his own monastery, from whom it met with but a cold reception, which in the Epistle to his friend, above-mentioned, he ascribes undoubtedly to its true cause, envy; however, his interest with the abbot, and his employment in the chapel, gave him an opportunity of trying the efficacy of his method on the boys who were training up for the choral service, and it exceeded the most sanguine expectation.

The fame of Guido's invention soon spread abroad, and his method of instruction was adopted by the clergy of other countries: we are told by Kircher that Hermannus, bishop of Hamburg, and Elvericus, bishop of Osnabrug, made use of it; and by the authors of the *Histoire Litteraire de la France*,* that it was received in that country, and taught in all the monasteries in the kingdom. It is certain that the reputation of his great skill in music had excited in the pope a desire to see and converse with him, of which, and of his going to Rome for that purpose, and the reception he met with from the pontiff, himself has given a circumstantial account of in the epistle before cited.

The particulars of this relation are very curious, and as we have his own authority, there is no room to doubt the truth of it. It seems that John XX. or, as some writers compute, the nineteenth pope of that name, having heard of the fame of Guido's school, and conceiving a desire to see him, sent three messengers to invite him to Rome; upon their arrival it was resolved by the brethren of the monastery that he should go thither attended by Grimaldo the abbot, and Peter the chief of the canons of the church of Arezzo. Arriving at Rome he was presented to the holy father, and by him received with great kindness. The pope had several conversations with him, in all which he interrogated him as to his knowledge in music; and upon sight of an antiphony which Guido had brought with him, marked with the syllables agreeable to his new invention, the pope looked on it as a kind of prodigy, and ruminating on the doctrines delivered by Guido, would not stir from his seat till he had learned perfectly to sing off a verse; upon which he declared that he could not have believed the efficacy of the method if he had not been convinced by the experiment he had himself made of it. The pope would have detained him at Rome, but labouring under a bodily disorder, and fearing an injury to his health from the air of the place, and the heats of the summer, which was then approaching, Guido left that city upon a promise to revisit it, and explain to his holiness the principles of his new system.

* Tom. VII. pag. 143, 144.

On his return homewards he made a visit to the abbot of Pomposa, a town in the duchy of Ferrara, who was very earnest to have Guido settle in the monastery of that place, to which invitation it seems he yielded, being, as he says, desirous of rendering so great a monastery still more famous by his studies there.

Here it was that he composed a tract on music, intitled *Micrologus*, i. e. a short discourse, which he dedicated to Theodald, bishop of Arezzo, and finished, as he himself at the end of it tells us, under the pontificate of John XX. and in the thirty-fourth year of his age. Vossius speaks also of another musical treatise written by him, and dedicated to the same person.

Divers others mention also his being engaged in the controversy with Berenger about the Eucharist, particularly Mersennus and Vossius; the latter of whom, who, by the manner in which he has spoken of Guido elsewhere, can hardly be supposed to have mistaken another person for him, says expressly that in the year 1070, namely, in the time of Gregory VII. flourished Guido, or Guidmundus, by country an Aretine, first a monk of the monastery of St. Leufred, and afterwards a cardinal of the church of Rome, and archbishop of Aversa; that while he was a monk he wrote two books on music to the bishop Theodald, the first in prose, the other partly in heroic verse, and partly in rythmical trochaics; and that he is the same who wrote against Berengarius three books concerning the body and blood of our Lord in the sacrament of the Eucharist.† Trithemius refers him to the year 1030, and Sigebert to 1028, which latter speaks also of the musical notes found out by him.

Du Pin, who in his *Ecclesiastical History* has given an account of Berenger and his errors, has enumerated the several authors that have written against him; among these he mentions Guimond or Guitmond, bishop of Aversa, as one who, in opposition to Berenger, maintained the real presence of the body and blood of Jesus Christ in the Eucharist. Nay, he goes so far as to cite several books of his writing in the controversy with Berenger, as namely, a treatise *De Veritate Eucharistiæ*, wherein he charges him with maintaining, among other errors, the nullity of infant baptism, and the lawfulness of promiscuous embraces.

Supposing this to be true, and Guimond and Guido to be one and the same person, the generality of writers have done his memory an injury in representing Guido as simply a monk, who was not only a dignitary of the church, but an archbishop, and a member of the sacred college. But it seems that Vossius and those whom he has followed are mistaken in these particulars: Bayle has detected this error, and has set the matter right, by relating that Guido and Guitmond were nearly contemporaries, but that it was the latter who was the monk of St. Leufred, in the diocese of Evreux in Normandy, afterwards bishop of Aversa in Italy, and at length a cardinal, and who wrote three books *De Veritate Corporis et Sanguinis Christi in Eucharistia adversus Beren-*

† *De Scientiis Mathem. cap. xxii. § 7.*

'In the above symphony you see six different particles, which are to be applied to as many different notes; and whenever the singer is able to apply these to such of the six notes as they properly belong to, he will be able to sing his devotions with ease. When you hear any Neuma, examine in your own mind which of these particles does best agree with its ending, so as that the final note of the Neuma, and the principal particles may be equisonous, whereby you will be certain that the Neuma ends in that note with which the particle agreeing therewith begins: but if you undertake any written cantus which you never saw before, you must sing it often over, that you may be able to end every Neuma properly, so that the end of each Neuma may in the same manner be joined with the beginning of the particle which begins by the same note in which the Neuma ends. By this method you will presently be able to sing any new cantus by the notes; and when you hear any that is not noted, you will soon perceive how it is to be written down, in the doing whereof this rule will greatly assist you. I have set down some short symphonies through every note of these particles, and when you shall carefully have looked them over, you will be glad to find out the depressions and elevations of every note in order in the beginnings of these particles: but if you should have a mind to attemperate certain particles of different symphonies by connexion, you may by a very short and easy rule learn all the difficult and manifold varieties of Neumas; but these cannot all be so well explained by letter, and would be more plainly opened in a familiar colloquy.

A

F Alme rector mores nobis sacrato; Summe pater ser-

D

F vis tuis miserere; Salus nostra honor noster esto Deus.

D

F Deus, judex justus fortis, et patiens: Tibi totus ser-

D

F vit mundus uni, Deus. Stabunt justi ante dominum

D

F Semper læti: Domino laudes omnis creatura dicat.*

He then proceeds thus: 'In writing we have twenty-three letters, but in every cantus we have only seven notes; for as there are seven days in a week, so are there seven notes in music, for all that are added above are the same, and are sung alike through the whole, differing in nothing but that they are sounded doubly higher. We say there are seven grave and seven acute, and that the second order of seven letters is written different from the other in this manner:—

a	b	c	d	e	f	g
A	B	C	D	E	F	G

* It is supposed that the above are the initial sentences of some hymns or other offices anciently used in the church, and which were part of the choral service. Guido has intimated that these examples can hardly be rendered intelligible without a verbal explanation; but it is conjectured by the letters D F A, that they are to be sung in the first of the ecclesiastical tones, that having A for its dominant, and D for its final.

Towards the end of this tract Guido directs the manner of constructing and dividing the monochord, which because he has done it more at large in the *Micrologus*, we forbear to speak of here; the rest of the epistle is taken up with a short disquisition on the ecclesiastical tones, at the close whereof he recommends the perusal of his *Micrologus*, and also a *Manual*, written with great perspicuity by the most reverend abbot Obdo,† from whose example he owns he has somewhat deviated, choosing, as he says, to follow Boetius, though he gives it as his opinion that his work is fitter for Philosophers than Singers.

The *Micrologus*, though, as its title imports, a short discourse, is considerably longer than the former tract. The title of it, as given by some transcriber of his manuscript, is, *Micrologus, id est brevis Sermo in Musica, editus a Domine Guidone piissimo Monacho et peritissimo Musico*.

In this tract, too, the author complains very feelingly of the envy of the times, and the malignity of his detractors.

In the dedication of the *Micrologus* to Theodald, the bishop of Arezzo, his diocesan, Guido confesses the goodness of his patron in vouchsafing to become his associate in the study of the Holy Scriptures, which he attributes to a desire to comfort and support him under the weight of his bodily and mental infirmities, and acknowledges, that if his endeavours are productive of any good to mankind, the merit of it is due to his patron, and not to him. He says that when music was employed in the service of the church, he laboured in the art not in vain, seeing that his discoveries in it were made public by the authority, and under the protection of his patron, who as he had regulated the church of St. Donatus, over which it was his office to preside, so had he rendered the servants thereof, by those privileges by him conferred on them, respectable amongst the clergy. He adds, that it is matter of surprise to him to find that the boys of the church of Arezzo should, in the art of modulation, excel the old men of other churches; and professes to explain the rules of the art for the honour of their house, not in the manner of the philosophers, but so as to be a service to their church, and a help to their boys, for that the art had a long time lain hid, and, though very difficult, had never been sufficiently explained.

The dedication is followed by a prologue, in which the author attributes to the grace of God the success of his endeavours to facilitate the practice of music; which success he says was so great, that the boys taught by his rules, and exercised therein for the space of a month, were able to sing at first sight, and without hesitation, music they had never heard before, in such a manner as to surprise most people.

It appears, as well from the epistle to his friend Michael, as from the *Micrologus*, that in the opinion of Guido the only way of coming at a knowledge of the intervals so as to sing them truly, was by means of the monochord; for which reason, though

† Odo of Cluni, of whom, and also of his *Enchiridion*, see an account in chap. 34. of this work.

he condemns the use of it for any other purpose than the bare initiation of learners in the rudiments of singing, he constantly recommends the study of it to young people. In the very beginning of the *Micrologus* he says, 'Whoever desires to be acquainted with our exercise, must learn such songs as are set down in our notes, and practise his hand in the use of the monochord, and often meditate on our rules, until he is perfect in the power and nature of the notes, and is able to sing well at first sight; for the notes, which are the foundation of this art, are best to be discerned in the monochord, by which also we are taught how art, imitating nature, has distinguished them.'

Guido proposes that the monochord shall contain twenty-one notes, concerning the disposition whereof he speaks thus :—

'First set down Γ Greek, which is added by the moderns, then let follow the first seven letters of the alphabet, in capitals, in this manner, A, B, C, D, E, F, G; and after these the same seven letters in the smaller characters; the first series denotes the graver, and the latter the acuter sounds. Nevertheless, among the smaller letters we insert occasionally b or h , the one character being round, the other square, thus a, b, h , c, d, e, f, g; to these add the tetrachord of superacutes, in which b is doubled in the same manner, aa, bb, hh , cc, dd, ee. These letters make in all twenty-two, Γ , A, B, C, D, E, F, G, a, b, h , c, d, e, f, g, aa, bb, hh , cc, dd, ee, the disposition whereof has hitherto been so perplexed as not to be intelligible, but it shall here be made most clear and plain, even to boys.'

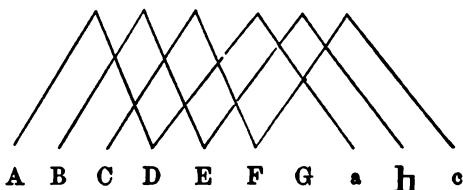
For the division of the monochord he gives the following directions :—

'Gamma Γ being placed at one extremity of the monochord, divide the space between that and the end of the chord into nine parts, and at the end of the first ninth part place A, from whence the ancients fixed their beginning; then from A divide the space to the end of the chord into nine parts, and in the same manner place B; then returning to Γ ; divide the whole space to the end into four parts, and at the end of the first fourth part place C. In the same manner as from Γ you found C, by a division of four parts, you will from A find D; from B, E; from C, F; from D, G; from E, a acute; from F, b round; the rest that follow are easily found by a bisection of the remaining parts of the line in the manner above directed, as for example, in the middle between B and the end place h . In like manner from C you will find a new c; from D a new d; from E another e; from F another f; and from G another g; and the rest in the same manner, proceeding upwards or downwards, ad infinitum, unless the precepts of the art should by their authority restrain it. Out of the many and divers divisions of the monochord, I have set down this in particular, it being easily to be understood, and when once understood is hardly to be forgotten.—Here follows another method of dividing the monochord, which,

'though not so easily to be retained, is more expeditiously performed. Divide the whole into nine parts, the first part will terminate in A, the second is vacant; the third in D, the fourth vacant; the fifth a, the sixth d, the seventh aa, the rest vacant. Again, divide from A to the end into nine parts; the first part will terminate in B, the second will be vacant, the third E, the fourth vacant, the fifth h , the sixth e, the seventh hh , the rest vacant: again, divide the whole from Γ to the end into four parts, the first will terminate in C, the second in G, the third in g, and the fourth finishes. Divide from C to the end likewise into four parts, the first part will end in F, the second in c, the third in cc, and the fourth finishes. Divide from F into four parts, the first will end in b round, the second in f: divide from b round into four parts, in the second you will find bb round, the rest are vacant. Divide from aa into four parts, the first will be dd, the rest are vacant. For the disposition of the notes these two methods of division are sufficient; the first is the more easy to be remembered, the second the more expeditious.'

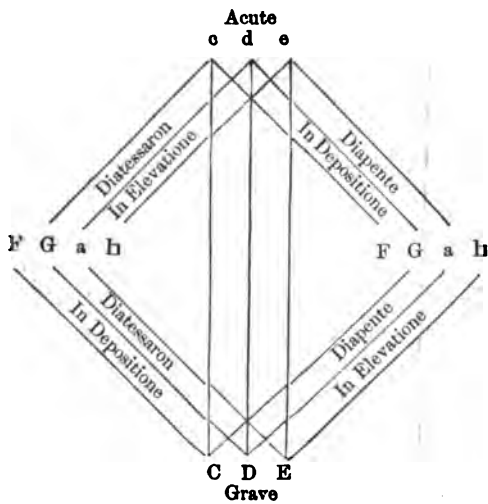
Upon this division of the monochord he observes, that there appears a greater distance between some of the notes, as Γ , A, and A, B, than between others, as B, C: he says the greater distance is called a tone, and the lesser a semitone, from semis an half; that a ditone is an interval consisting of two tones, as C, D, E, and that that is called a semiditone which contains only a tone and half, as from D to F. He says that when between any two notes there occur in any order whatever, two tones and a semitone, as from A to D, from B to E, and from C to F, the extreme sounds make a diatessaron, but that a diapente is greater by a tone; as when between any two notes there occur three tones and a semitone, as from A to E, or from C to G. He reckons up six consonances, that is to say, the tone, semitone, ditone, semiditone, diatessaron, and diapente, to which number he says may also be added the diapason as a seventh; but that as it is seldom introduced, it is not so commonly ranked among them.*

In the seventh chapter of the *Micrologus* the author treats of the affinity of notes, or, in other words, of the consonances; those of the diatessaron and diapente he explains by the following figure :—



In the eighth he shews the affinity between b and h , and distinguishes between the diatessaron and diapente in this diagram :—

* The manuscript must certainly be erroneous in this place, for the semitone can in no sense whatever be deemed a consonance; and as to the diapason, it is so far from being seldom introduced, that it is the most usual and perfect of all the consonances.



In the twelfth and thirteenth chapters he speaks of the division of the four modes into eight, and says that as there are eight parts of speech, and eight forms of blessedness, *i. e.* beatitudes, so ought there to be eight modes in music. In the fourteenth chapter he treats more particularly of the modes, which he calls Tropes, and of the effects of music: of these he says their properties are so different, that in the same manner as a person accustomed to different countries is able out of several men placed before him, to say 'this is a Spaniard, this an Italian, 'this a German, and this other a Frenchman;' so may one that is skilled in music by their diversities distinguish the tropes. Farther he ascribes to the tropes different properties; for 'one person,' says he, 'delights in the broken leaps of the second authentic; 'another in the softness of the third plagal; a third 'shall be delighted with the garrulity of the fourth 'authentic, and another shall approve the mellifluous 'sweetness of the fourth plagal.' As to the power of music, he says it is so great as to cure many diseases of the human body; he cites a relation of a frantic person who was restored to reason by the music of Asclepiades the physician; and mentions also that a certain other person was by the sound of the lyre, so stirred up to lust, that he attempted to force into the chamber of a young woman with intent to violate her chastity, but that the musician, immediately changing the mode, caused him to desist from his purpose.

CHAP. XXXVII.

According to Guido, cap. xv. four things are required in every cantus,—sounds, consonances, neumas, and distinctions: from sounds proceed consonances, from consonances neumas, and from neumas distinctions: this it seems was the ancient scholastic division of vocal music, and it is adopted by all the monkish writers on the art. A Neuma is the smallest particle of a cantus, and is elsewhere said to signify as many notes as can be sung in one respiration. By distinctions the author seems to mean nothing more

than the different measures of time, which, for aught that any where appears to the contrary, were regulated solely by the metre of the verse to which the notes were sung. Speaking of neumas, he says they may be reciprocated or return by the same steps as they proceeded by; and adds that a cantus is said to be metrical when it scans truly, which, if it be right, it will do even if sung by itself. Neumas, he says, should correspond to neumas, and distinctions to distinctions, according to the perfectly sweet method of Ambrosius. Farther he says that the resemblance between metres and songs is not small, for that neumas answer to feet, and distinctions to verses; the neuma answers to the dactyl, spondee, or iambic; the distinction to the tetrameter, the pentameter, or the hexameter, and the like. He adds, 'Every cantus 'should agree with the subject to which it is adapted, 'whether it be grave, tranquil, jocund, or exulting; 'and that towards the end of every distinction the 'notes should be thinly disposed, that being the place 'of respiration; for we see that when race-horses 'approach the end of the course they abate of their 'speed, and move as if wearied.'

Cap. xvi. he treats of the manifold variety of sounds and neumas, and says that it ought not to seem wonderful that such a variety should arise from so few notes, since from a few letters syllables are formed, which, though not innumerable, do yet produce an infinite number of parts. 'How many kinds 'of metre' adds he, 'arise out of a few feet, and by 'how many varieties is each capable of diversification? but this he says is the province of the grammarians.' He proceeds to show what different neumas may be formed from the six consonances; he assumes that every neuma, or, as we should now say, every passage, must necessarily either ascend or descend; an ascending neuma he terms *Arsis*, a descending, *Thesis*; these he says may be conjoined: and farther he says that by means of a total or partial elevation or depression of any neuma, different combinations may be formed, and a great variety of melody produced.

In cap. xvii. he lays it down as a rule, that as whatever is spoken may be written, so there can be no cantus formed but what may be designed by letters; and here he exhibits a rule for a kind of extemporaneous musical composition, which must doubtless appear very strange to a modern: he says in singing no sound can be uttered but by means of one or other of the five vowels, and that from their changes a sweet concord will ensue; he therefore first directs the placing the letters of the monochord, and the vowels under them in this order:—

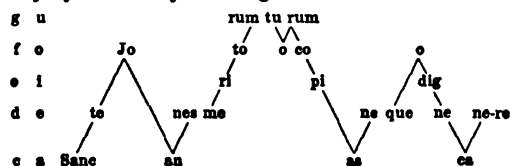
Γ A B C D E F g a h c d e f g a
a e i o u a e i o u a e i o u a

And, to exemplify their use, recommends the taking some such known sentence as this:—

Sancte Joannes, meritorum tuorum copias, nequeo digne canere.

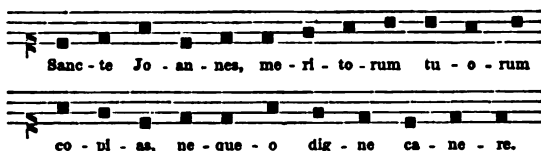
In this example the vowels determine the music; for as in the above scheme the power of each sound is transferred to its correspondent vowel, the succession

of the vowels will exhibit a series of sounds to which every syllable may be sung :—

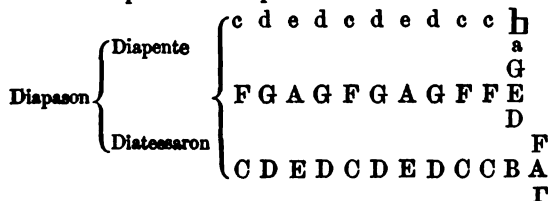


It is clear from the connection between the vowels and the letters of the monochord, that the diapente here made use of is taken from among the acutes; because in the disposition above made, the vowel *a* answers to *Γ*; but had he chosen the graves for an example, the progression of the cantus had been precisely the same; for as *d* is to *c*, so is *A* to *Γ*, and as *f* is to *c*, so is *C* to *Γ*; as *g* is to *c*, so is *D* to *Γ*, and so of the rest.

This it must be confessed is but a fortuitous kind of melody; it seems however to have suited well enough with the simplicity of the times, which affords us no reason to believe that the art of composing music was arrived at any great degree of perfection. By the rule here given the above cantus may easily be rendered into modern notes, in which it will have this appearance :—



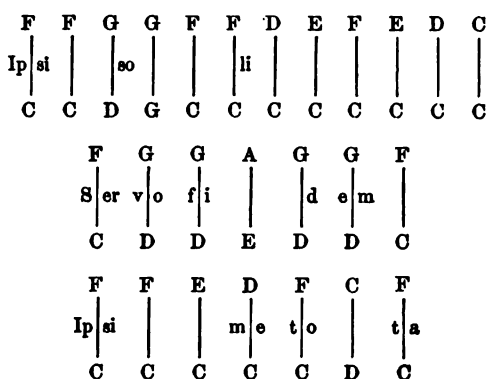
The eighteenth chapter of the *Micrologus* is an explanation of the *Diaphonia*, by which term we are to understand those precepts that teach the use of the organ, and its application to vocal melody; concerning which Guido says, that supposing the singer to utter any given sound, as for instance *A*, if the organ proceed to the acutes, the *A* may be doubled, as *A D a*, in which case it will sound from *A* to *D*, a diatessaron, from *D* to *a*, diapente, and from *A* to *a*, a diapason: he farther says, that these three kinds, when uttered by the organ, commix together with great sweetness, and that the apt copulation of notes is called *Symphony*. He gives this which follows as an example of the *diaphonia* :—



And adds that a cantus may be doubled by the organ, and the organ itself in the diapason, as much as the organist pleases. He says that having made the doubling of sounds sufficiently clear, he will explain the method of adapting grave sounds to a cantus, in the doing whereof he premises that the *Diaphonia* admits not of the semitone nor diapente, but that it accepts of the tone, ditone, semiditone,

and diatessaron, among which consonances the diatessaron holds the principal place. Of the modes, which he calls Tropes, he says that some are fit, some more fit, and others most fit, for the *Diaphonia*; and these degrees of fitness seem to bear a proportion to the number of concordant intervals in each. As an instance of the highest degree of this kind of perfection, he mentions the third and fourth tones, which he says follow kindly and sweetly, with a tone, ditone, and diatessaron.

In the nineteenth chapter are contained sundry examples to illustrate the precepts delivered in the chapter preceding, among which are the following :—



The several precepts contained in the *Micrologus*, together with the examples above given, may serve to shew the inartificial contexture of the music in those early days: they farther tend to confirm those accounts which carry the antiquity of the organ back to a time, when, from the uncultivated state of the mechanic arts, it would hardly be supposed that an instrument so wonderfully constructed could have been fabricated.*

After delivering the precepts of the *Diaphonia*, the author from Boetius relates the discovery of the consonances by Pythagoras. He exhorts such as mean to become excellent in music to take the monochord for their guide, and repeats his instructions for making and dividing it.

A little farther on he resumes the consideration of the tones, and is somewhat precise in ascertaining their respective limits, and distinguishing between the authentic and the plagal. He says that the same antiphon may be sung in different sounds without changing the harmony: or, in other words, that it may be so transposed, as that the sounds may bear the

* The state of the mechanic arts, so far as they relate to the constructing and making the several utensils and conveniences for domestic life, would, were it possible to come at it, afford great satisfaction to a curious enquirer, as it would enable him, by a comparison of two very remote periods, to estimate the degree of perfection at which we are now arrived. Few of those persons, who are curious enough to attend to the manual operations of our English artificers, are ignorant that they work with an amazing degree of truth and accuracy. A very curious book, now extant, called the *Book of St. Alban's*, written by dame Juliana Barnes, prioress of the nunnery of Sopwell, near St. Alban's, describes the method of making an angling rod in the year 1496; and gives us to understand that the mechanics of that time thought the neatest method of hollowing a stick for that purpose was the burning it through with a hot spit; and it is not unlikely but that four hundred years before that, an organ-pipe was perforated in no better a manner; and if we suppose the same want of neatness in the various other parts of that complicated machine of which we are now speaking, we may fairly conclude that both the organ and the music of the eleventh century were equally rude and inartificial.

same relation to each other as if not transposed. He says that the second letter, by which we are to understand *H*, is rejected as ignoble, and unfit to be the principal of any tone: the reason of this is, that its fifth is defective, as being less than a true diapente by a semitone.

The residue of this tract, the *Micrologus*, consists of miscellaneous reflections on the use and efficacy of music: towards the close of it is the following tetrastic.

Quasdam lineas signamus variis coloribus
Ut quo loco sit sonus mox discernat oculus;
Ordine tertie vocis splendens crocus radiat,
Sexta ejus, sed affinis flavo rubet minio.

Upon which he observes, that if a letter and colour be not affixed to a Neuma, it will be 'like a well without a rope.' These verses are an absolute enigma, and it would be a vain attempt to explain them, did not a passage in another part of this author's writings afford some intimation that by the red line he intended to denote the *F*, and by the yellow the *C* cliff: however we are not to look on this method of distinguishing the cliffs by lines of different colours as the invention of Guido, since it appears to have been in use so early as the year 900, which is at least an hundred years before the time when he wrote.

He seems to close his tract with an assurance that he has made the rules clear, and laid open to singers the regular and perfect manner of singing in a method unknown to former times. But he immediately resumes his subject in these words, '*Temporibus nostris super omnes homines fatui sunt cantores;*' and goes on to explain some particulars that are before but obscurely treated of; in the doing whereof Guido takes occasion to represent the woful state of music, and the deplorable ignorance of singers at the time when he wrote; the whole is curious, and will be best understood if given in his own words, which are nearly these:—

'In these our times no set of men are so infatuated as singers; in every other art we improve, and in time attain to a greater degree of knowledge than we derived from our teachers: thus by reading over the simple psalter, boys are enabled to read other books; the countryman by use and exercise acquires the knowledge of agriculture; he who has pruned one vine, planted one shrub, or loaded one ass, is able not only to do the same again, but to do it better; but, miserable disciples of singers, they, though they should practise every day for an hundred years, would never be able to sing even one little antiphon themselves, nor without the help of a master, but lose as much time in attaining to sing, as would have enabled them fully to understand the divine writ. And what is more to be lamented is, that many clerks of the religious orders, and monks too, neglect the psalms, the nocturnals and vigils, and other lessons of piety, by which we are led to everlasting glory, while they with a most foolish and assiduous labour prosecute the art of singing, which they are never able to attain. Who then can refrain from tears to see such an evil creep into the church? from whence such discord

ensues, that we are unable to celebrate the divine offices. Nor is this all, for this ignorance of their duty begets reproach, from whence proceeds contention; scarce the scholar with the master can agree, and much less one fellow scholar with another. Neither is there any uniformity of music at this day in the churches; for there are as many kinds of antiphons as there are masters; insomuch that no one can say as heretofore, this is the antiphon of Gregory, or Leo, or Albert, or any other; but every one either varies these, or forms others at his pleasure. It ought not therefore to give offence if I contend with the corruptions of the times, and endeavour to render the practice of music conformable to the rules of the art: and as all these corruptions have arisen from the ignorance of musicians, I must earnestly request that no one will presume to make antiphons, unless he be well skilled in the art of forming them according to the known and established rules of music; it being most certain that he who is not the disciple of truth will be a teacher of error. And for these reasons I intend, with the help of God, to note down a book of antiphons, by means whereof any assiduous person may attain to sing truly, and without hesitation; and if any one doubts the efficacy of our method, let him come and see what our little boys can do, who labouring under their ignorance, as not being able to read the common psalter, are yet capable of singing the music to it, and can without the help of a master sing the notes, though they cannot pronounce the words.'

The letters of Gregory, he says, 'are so disposed, that if a note be repeated ever so often it will always have the same character; but the better to distinguish the order of notes, lines are drawn near to each other, and notes are placed on these lines, and also on the spaces between the lines.' He adds, 'we make use of two colours, yellow and red, by means whereof I give a rule very useful and convenient for finding out the tone and the letter of the monochord, to which any given neuma is to be referred. There are seven letters in the monochord; and wherever you see the yellow it is the sign of the third letter, and wherever red it denotes the sixth, whether the colours are drawn in the lines or over them.'

This is the passage above hinted at as containing a solution of the enigmatical tetrastic at the latter end of the *Micrologus*: the author has said that the letters of the monochord are seven; it is supposed that he means to exclude *F* from the number, as the chord of which that letter is a sign is assumed; if so, the letters must be *A, B, C, D, E, F, G*, and then the yellow line will denote the place of *C*, and the red that of *F*. Father Martini, who had an opportunity of consulting a greater variety of missals and other manuscripts than are to be found in this country, makes no scruple to assert that this is Guido's meaning, and produces divers fragments from ancient books of the church-offices, which have both a yellow and a red line, the first ever with the letter *C*, and the other with *F*, in the usual place of the cliff.

The examples of the use of the yellow and red lines

produced by Martini are very many, but as the lines do all stand single, and as upon, above, and below them divers characters are placed, which bear not the least resemblance to the points used by Guido and his successors, it may be questioned whether this variety of colors was not originally adapted to a method of notation in use before his time, notwithstanding that it coincides so well with the stave. But Kircher, in the *Musurgia*, tome I. pag. 555, has reduced this question to a certainty; and, notwithstanding the general opinion, that before the time of Guido the only method of notation in use was by the Roman capital and small letters, which St. Gregory introduced, Martini proves that the notators, as they are called, of that time, made use of certain marks in this form ((*π* *ω*...*✓*)* and as to lines of different colours, Kircher relates that he had found in the monastery of Vallombrosa sundry very ancient books, written for the use of the choir there, before the time of Guido; and that the method of notation in those books was by a red line, with certain notes or points placed in different situations above and below, according to the intervals intended to be marked by them.† Nivers speaks also to the same purpose; for enquiring into the causes of the corruption of the *Cantus Gregorianus*, he assigns for one, the uncertainty of the method of notation before the time of Guido; for he says till his reformation of the scale, the characters were only small points, commas, accents, and certain little oblique strokes, occasionally interposed; which great variety of minute figures he says was very difficult to comprehend, still more to retain, and impossible to reduce to practice without the assistance of a master. In proof of this assertion he waives the authority of Kircher, who has mentioned the same fact, and says that he engaged in an exact and laborious research among the most ancient manuscripts in the library of the king of France, and in that of St. Germain De Prez, and others. Nay, he says that he had caused the Vatican to be searched, and had received from thence, memoirs and extracts from manuscript antiphonaries, and graduals, many of which were above nine hundred years old, in which these characters appear. He farther says, that in this method of notation, by points and other marks, it was impossible to ascertain the difference between the tone and semitone, which is in effect saying that the whole contrivance was inartificial, productive of error, and of very little worth. *Dissertation sur le Chant Gregorien*, chap. vi. Specimens of this method of notation, taken from Martini, vol. I. pag. 184, are inserted in the Appendix, No. 42.‡

* *Stor. della Musica*, pag. 183.

† What Guido has said respecting the stations of the cliffs, and the practice of distinguishing them by red and yellow lines, is confirmed by the specimens from Martini (Appendix, 42.); but it may here be remarked that they were also distinguished by lines of a different thickness from the others in the stave, as appears by an example, taken from the *Lexicon Diplomaticum* of Johannes Ludolphus Walther, fol. Ulm. 1756. (See Appendix, No. 41.)

‡ There has lately been discovered in the library of Bennet college in Cambridge, a manuscript containing examples of the method of notation by irregular points above spoken of; and a learned and ingenious gentleman of that college has furnished this work with the following article from the catalogue of that collection:—

473. N. xxxviii. Codex membranaceus minoris formæ, ante Conquisitionem exaratus. Hymni (sive ut sæpius in hoc Codice nominantur

From what has been said some idea may be formed of the nature and tendency of the *Micrologus*, and other tracts of Guido. Whether he was the author of any other than have been mentioned, is not easy to determine; but it seems that those from which the foregoing extracts are taken, contain as much of his doctrine as he thought communicable by writing; for it is to be remarked that he frequently takes occasion to say that some particulars of it are not to be understood but by a familiar conversation, and it is to be feared that most of his readers must entertain the same opinion.

It no where appears that any of his works were ever printed, except that Baronius, in his *Annales Ecclesiastici*, tom. XI. pag. 73, has given at length the epistle from him to his friend Michael of Pomposa, and that to Theodald, bishop of Arezzo, prefixed to the *Micrologus*, and yet the writers on music speak of the *Micrologus* as of a book in the hands of every one. Martini cites several manuscripts of Guido, as namely, two in the Ambrosian library at Milan, the one written about the twelfth century, the other less ancient: another among the archives of the chapter of Pistoja, a city in Tuscany; and a third in the Mediceo-Laurenziano library at Florence, of the fifteenth century: these are clearly the *Micrologus*. Of the Epistle to Michael of Pomposa, together with the *Argumentum novi Cantus inveniendi*, he mentions only one, which he says is somewhere at Ratisbon §.

Of the several tracts above-mentioned, the last excepted, a manuscript is extant in the library of Baliol college in Oxford. Several fragments of the two first, in one volume, are also among the Harleian manuscripts now in the British Museum, Numb. 3199, but so very much mutilated, that they afford but small satisfaction to a curious enquirer. The Baliol manuscript contains also the *Enchiridion* of Odo, which Guido, at the close of the *Argumentum novi Cantus inveniendi*, highly commends; as also the tract of Berno abbot of Richenou before mentioned.

The above particulars of the life and labours of Guido, which have indeed the merit of being immediately collected from his own writings, are possibly all that we shall ever be able to learn about him; for by a kind of fatality, very difficult to account for, his memory lives only in his inventions, and though there is scarce a dictionary, not to mention the innumerable tracts that direct the practice of vocal music, but mention him as having taken the syllables *UT*, *RE*, *MI*, *FA*, *SOL*, *LA* from a hymn of St. John the Baptist, and applied them to certain notes in the scale of music, yet no one author of credit, if we except cardinal Baronius, and he seems more desirous of recording the Invention, than perpetuating the Memory of its author, has thought him worthy of a more honourable testimony than is every day given by the writers of *Bibliothèques*, *Memoirs*, and *Anecdotes*, to any scribbling professor of the *Belles Lettres*.

This supineness, or ignorance, or whatever else it

Tropi) recitandi diebus Dominicis et festis inter sacra celebranda cum notis musicis.

The last specimen in this plate is inserted from the manuscript thus described.

§ *Storia della Musica*, passim, et pag. 457, GUIDO.

may deserve to be called, with respect to Guido and his improvements, has been the source of many mistakes, as namely, that he was the inventor of music in consonance, and of the organ and harpsichord; and that he was the first that introduced the practice of descant in singing. In the course of the present work some of these inventions have been, and the others severally will be, fixed at periods very remote from that in which Guido lived: at present it shall suffice to refute them by saying, that as to the organ, it was invented long before;* and farther, Guido himself in his *Micrologus* frequently mentions the organ as an instrument in common use in his time. As to the harpsichord, the name of it, or of the spinnet, of which it is manifestly but an improvement, does not once occur in the writings of the monkish musicians who wrote after Guido, nor in the works of Chaucer, who seems to have occasionally mentioned all the various instruments in use in his time. Gower indeed speaks of an instrument called the citole, in these verses:—

He taughte hir till the was certeyne
Of harpe, citole, and of riote,
With many a tewe, and many a note.
Confessio Amantis, fol. 178, b.

And by an ancient list of the domestic establishment of Edward III. it appears that he had in his service a musician called a cyteller, or cysteller: the citole or cistole, derived from *cistella*, a little chest, might probably be an instrument resembling a box with strings on the top or belly, which by the application of the *tastatura* or key-board, borrowed

* *Vide ante page 147.*

from the organ, and jacks, became a spinnet. But as to the harpsichord, the earliest description of it which, after a careful research, could be found, is that of Ottomar Luscinius, in his *Musurgia*, published at Strasburg, in 1536. As to descant, it was the invention, as some imagine, of Bede, and he lived under the Saxon heptarchy, about the year 673; and lastly, whether the common use of the organ and the practice of descant, do not pre-suppose music in consonance, is submitted to the judgment of all who profess to know any thing of the science.

As Guido made no pretensions to great learning, or skill in philosophy, but seems indeed to have been absorbed in the study of his psalter and the church offices, no one of the many writers who have occasionally mentioned him, has entered into the particulars either of his character or his institution; but his reformation of the scale, his improvement of the stave, and the method of notation invented by him, which has introduced into the world a kind of universal character,† bespeak his merit more than the most laboured encomium could do, and have procured him a reputation that must in all probability endure as long as the love of music shall subsist.

† It is literally true, that for the purpose of representing musical sounds by writing, the system of Guido is an universal character; and every day's experience informs us that men of different countries, and who speak different languages, and therefore are incapable of verbal communication, have yet the same idea of the power of the musical characters, which they discover by their readiness in performing compositions that they have never studied. And this consideration has induced some men to assert that the scale of music might be made to serve the purpose of an alphabet. Bishop Wilkins first started this notion, and it is very ingeniously prosecuted in his tract entitled *The secret and swift Messenger*, chap. xviii. and by Mr. Oldys in the life of Peter Bales, the famous penman, in the *Biographia Britannica*.

BOOK V. CHAP. XXXVIII.

THE system of Guido, and the method invented by him for facilitating the practice of vocal melody, was received with universal applause, and in general adopted throughout Europe. The clergy, no doubt, favoured it as coming from one of their own order; and indeed they continued to be the only cultivators of music in general for many centuries after his time. The people of England have long been celebrated for their love of cathedral music; not only in Italy, Germany, and France, but here also, the offices were multiplied in proportion to the improvements made in music; and a great emulation arose, among different fraternities, which should excel in the composition of music to particular antiphons, hymns, and other parts of divine service. It farther appears, that about the middle of the eleventh century, the order of worship was not so settled but that a latitude was left for every cathedral church to establish each a formulary for itself, which in time was called its *Use*: of this practice there are the plainest intimations in the preface to the Common Prayer of queen Elizabeth.‡ And we elsewhere learn, that

‡ 'And where heretofore there hath bene great diversitie in saying and singing in churches within this realme; some following Salisburie use, some Hereford use, some the use of Bangor, some of Yorke, and some of Lyncolne. Now from henceforth all the whole realme shall have but one use.' Upon which passage it is to be noted that in the

of the several uses which had obtained in this kingdom, that of Sarum, established anno 1077, was the most followed; and that hence arose the adage '*Secundum usum Sarum.*'§

Of the origin of the use of Sarum there are several relations, none of which do great honour to its inventor Osmund, bishop of that see. Bale, of whom indeed it may be said, that almost all his writings are libels, has given this account of him, and the occasion of framing it:—'Osmundus was a man of great adventure and policie in hys tyme, not only concernynge robberyes, but also the slaughter of men in the warres of kyng Wyllyam Conquerour: whereupon he was first the grande captayne of Saye, in Normandy, and afterwards earle of Dorset, and also hygh-chauncellour of Englande. As Herman, the byshop of Salisbury, was dead, he gaue over all, and succeeded him in that byshoppryck, to lyue, as it were, in a securyte or ease in hys lattre age; for than was the church become Jefabel's pleafaunt and easy cowch. His cautels were not so fyne in the other

northern parts, the use of the archiepiscopal church of York prevailed; in South Wales, that of Hereford; in North Wales, that of Bangor; and in other places, the use of other of the principal sees, particularly that of Lincoln. Ayliffe's *Parergon*, pag. 356. Burn's *Ecll. Law* vol. II. pag. 278.

§ *Vid. Fuller's Worthies in Wilts*, pag. 146.

'kynde for destrucþyon of bodyes; but they were also 'as good in thys, for destrucþyon of fowles. To 'obscure the glory of the gospel preachynge, and 'augment the filthynesse of ydolatry, he practysed 'an ordynary of popysh ceremones, the whyche he 'entyled a Consuetudynary, or usual boke of the 'churche. Hys fyrst occasyon was thys: a great 'battayle chaunced at Glastenburye, whyls he was 'byshop, betweene Turstinus, the abbot, and hys 'monkes, wherein some of them were slayne, and 'some fore wounded, as is sayd afore. The cause of 'that battayle was thys: Turstinus contempnyng 'their quere servyce, than called the use of Saint 'Gregory, compelled hys monkes to the use of one 'Wyllyam, a monke of Fiscan, in Normandy. Upon 'thys, Osmundus devyfed that ordynary called the 'Use of Sarum, whyche was afterwards received in 'a manner of all Englande, Irelande, and Wales. 'Every Syr Sander Slyngesby had a boke at hys belte 'thereof, called hys Portasse, contaynyng many super- 'stycyouse fables and lyes, the testament of Chryft set 'at nought. For thys acte was that brothel byshop 'made a popysh god at Salisbury.*

Fox, a writer not quite so bitter as the former, gives the following account of the matter:—

'A great contention chanced at Glaystebure, be- 'tweene Thurstanus, the abbat, and his convent, in 'the daies of William Conqueror, which Thurstanus 'the said William had brought out of Normandy, 'from the abbey of Cadonum, and placed him abbat 'of Glastenburye. The cause of this contentious bat- 'tell was, for that Thurstanus contemning their quier 'service, then called the Use of S. Gregory, compelled 'his monkes to the use of one William, a monke of 'Fiscan, in Normandy: whereupon came strife and 'contentions amongst them; first in words, then from 'words to blowes, after blowes, then to armour. The 'abbat, with his gard of harnest men, fell upon the 'monks, and drave them to the steps of the high altar, 'where two were slain, eight were wounded with 'shafts, swords, and pikes. The monks, then driven 'to such a strait and narrow shift, were compelled to 'defend themselves with formes and candlesticks, where- 'with they did wound certaine of the fouldiers. One 'monk there was, an aged man, who, instead of his 'shield, took an image of the crucifix in his armes 'for his defence; which image was wounded in the 'breast by one of the bowmen, whereby the monk 'was saved. My story addeth more, that the striker, 'incontinent upon the same, fell mad; which favoereth 'of some monkish addition, besides the text. This 'matter being brought before the king, the abbat was 'sent again to Cadonum, and the monkes, by the 'commandement of the king, were scattered in far 'countries. Thus, by the occasion hereof, Osmundus, 'bishop of Salisbury, devyfed that ordynary which is 'called the Use of Sarum, and was afterwards received, 'in a manner through all England, Ireland, and Wales.†

* The second Part, or Continuation of the English Votaries, fol. 30. b.

† It appears from Lyndwood, not only that the use of Sarum prevailed almost throughout the province of Canterbury, but that in respect thereof the bishop of that diocese claimed, by ancient usage and custom, to

'And thus much for this matter, done in the time of 'this king William.‡

As to the formulary itself, we meet with one called the Use of Sarum, translated into English by Miles Coverdale, bishop of Exeter, in the Acts and Monuments of Fox, vol. III. pag. 3, which in truth is but a partial representation of the subject; for the Use of Sarum not only regulated the form and order of celebrating the mass, but prescribed the rule and office for all the sacerdotal functions; and these are contained in separate and distinct volumes, as the Missal itself, printed by Richard Hamillon, anno 1554; the Manual, by Francis Regnault, at Paris, anno 1530; Hymns, with the notes, by John Kyngston and Henry Sutton, Lond. 1555; the Primer, and other compilations: all which are expressly said to be 'ad usum ecclesie Sarisburiensis.' Sir Henry Spelman seems to have followed Fox rather implicitly in the explanation which he gives of the Use of Sarum in his Glossary, pag. 501.

It is no easy matter, at this distance of time, to assign the reasons for that authority and independence of the church of Salisbury which the framing a liturgy, to call it no more, for its own proper use, and especially the admission of that liturgy into other cathedrals, supposes: but this is certain, that the church of Sarum was distinguished by divers customs and usages peculiar to itself, and that it adopted others which the practice of other churches had given a sanction to: among the latter was one so remarkable as to have been the subject of much learned enquiry. §

The usage here particularly alluded to, is that of electing a Bishop from among the choristers of the

execute the office of precentor, and to govern the choir, whenever the archbishop of Canterbury performed divine service in the presence of the college of bishops. 'Quasi tota provincia [Cantuariensis] hunc usum sequitur; and adds, as one reason of it, 'Episcopus namque Sarum in collegio episcoporum est precentor, et temporibus quibus archiepiscopus Cantuariensis solenniter celebrat divina, præsente collegio episcoporum, chorum in divinis officiis regere debet, de observantia et consuetudine antiqua.' Provinciale, tit. De Perils, cap. ult. [Anglicanæ Ecclesiæ] Ver. Usum Sarum. Gibs. Cod. pag. 294. And an instance of the actual exercise of the office of precentor or chanter at a public solemnity, by a bishop of Salisbury, occurs in an account of the christening of prince Arthur in the Collectanea of Leland, vol. III. pag. 208. and is thus related:—'The bishop of Ely was deken, and rede the gospel. The bishop of Rochester bar the crosse, and redde th' epistell. The bishop of Saresbury was chanter, and beganne the office of the masse.' The Bishop of Salisbury officiated as Precentor or Chanter at the Coronation of King George III. and his Queen. The Precentor's fee of old on the coronation day was a mark of gold. Strype's Slow, book VI. pag. 13.

‡ Acts and Monuments, Lond. 1640, vol. I. pag. 238.

§ See a tract entitled Episcopus Puerorum in Die Innocentium, or a Discovery of an ancient Custom in the Church of Sarum, of making an anniversary Bishop among the Choristers; it was written at the instance of bishop Montague by John Gregory of Christ Church, Oxon, and is among his Posthuma, or second part of his works, published in 1684.

In this tract, which abounds with a great variety of curious learning, the author takes occasion to remark, that the observance of Innocent's Day is very ancient in the Christian church; and that in a runic wooden calendar, a kind of almanac, from which the log or clog, mentioned in Dr. Plot's History of Staffordshire, is derived, this and other holidays are distinguished by certain hieroglyphics: for an instance to the purpose, the holiday here spoken of was signified by a drawn sword, to denote the slaughter of that day. That of SS. Simon and Jude by a ship, because they were fishers. The festival of St. George, by a horse, alluding to his soldier's profession. The day of St. Gregory which is the twelfth of March, this author says was thus symbolized:—'They set you down in a picture a school-master holding a rod and ferula in his hands. It is, adds he, because at that time, as being about the beginning of the spring, they use to send their children first to school. And some, he says, are so superstitiously given, as upon this night to have their children asked the question in their sleep, whether they have a mind to book or no; and if they say yes they count it for a very good presage, but if the children answer nothing, or nothing to that purpose, they put them over to the plough.'

cathedral of Sarum, on the anniversary of St. Nicholas, being the sixth day of December; who was invested with great authority, and had the state of a diocesan bishop from the time of his election until Innocent's Day, as it is called, the twenty-eighth of the same month. It seems, that the original design of this singular institution was to do honour to the memory of St. Nicholas, bishop of Myra, in Lycia; who, even in his infancy, was remarkable for his piety, and, in the language of St. Paul to Timothy, is said to have known the scriptures of a child. Ribadeneyra has given his life at large; but the following extract from the English Festival,* contains as much about him as any reasonable man can be expected to believe. 'It is fayed, that hys fader hyght Epiphanius, and his moder, Joanna, &c. And whan he was born, &c. they made hym Chrysten, and called hym Nycolas, that is a mannes name; but he kepeth the name of a chyld; for he chose to kepe vertues, meknes, and symplenes, and without malycie. Also we rede, whyle he lay in hys cradel, he fasted Wednesfday and Fryday: these days he would fouke but ones of the day, and therewyth held hym plesed. Thus he lyved all his lyf in vertues, with thys chyldes name; and therefore chyldren don hym worship before all other faynts.†

That St. Nicholas was the patron of young scholars is elsewhere noted; and by the statutes of St. Paul's school, founded by dean Colet, it is required that the children there educated, 'shall, every Childermas Day, come to Paulis church, and hear the chylde-byshop sermon, and after be at the hygh-masse, and each of them offer a i. d. to the childe-byshop, and with them the maisters and surveours of the scole.‡

The ceremonies attending the investiture of the *Episcopus Puerorum* are prescribed by the statutes of the church of Sarum, which contain a title, *De Episcopo Choristarum*; and also by the Processional. From these it appears, that he was to bear the name and maintain the state of a bishop, habited, with

* In St. Nicholas, fol. 55.

† A circumstance is related of this bishop Nicholas, which does not very well agree with the above account of his meek and placid temper; for at the Council of Nice, this same bishop, upon some dispute that arose between them, is said to have given the heretic Arius a box on the ear. Bayle, vol. II. pag. 530, in not.

‡ By this statute, which with the rest is printed as an Appendix to Dr. Knight's life of dean Colet, it should seem, that at the cathedral of St. Paul also they had an *Episcopus Puerorum*; for besides the mention of the sermon, the statute directs, that an offering be made to the childe byshop. Indeed Strype says, 'that almost every parish had its saint Nicholas.' *Memorials Ecclesiastical under Queen Mary*, pag. 206. In the book of the household establishment of Henry Algermon Percy, earl of Northumberland, compiled anno 1512, and lately printed, are the following entries:—'Item, My lord usith and accusomth yerely, when 'his lordship is at home, to yef unto the barne-bishop of Beverley, when 'he comith to my lord in Christmas hally-dayes, when my lord kepith 'his hous at Lekynfield, xxs. Item, my lord useth and accusomth to 'gif yearly, when his lordship is at home, to the barne-bishop of Yorke, 'when he comes over to my lord in Christynmasse hally-dayes, as he is 'accusometh yearly, xxs.' Hence it appears that there were formerly two other barne, i. e. bearn, or infant-bishops in this kingdom, the one of Beverley, the other of York. And Dr Percy, the learned editor of the above book, in a note on the two articles here cited, from an ancient MS. communicated to him, has given an inventory of the splendid robes and ornaments of one of these little dignitaries. Farther, there is reason to suppose that the custom above-spoken of prevailed, as well in foreign cathedrals, as in those of England, for the writer above-cited, (Mr. Gregory) on the authority of Molanus, speaks of a chorister-bishop in the church of Cambray, who disposed of a prebend which fell void in the month or year of his episcopate, in favour of his master. Some of these customs that relate to the church are more general than is imagined, that of obliging travellers, who enter a cathedral with spurs on, to pay a small fine, called spur-money, to the choristers, upon pain of being locked into the church, prevails almost throughout Europe.

a crosier or pastoral-staff in his hand, and a mitre on his head. His fellows, the rest of the children of the choir, were to take upon them the style and office of prebendaries, and yield to the bishop canonical obedience; and, farther, the same service as the very bishop himself, with his dean and prebendaries, had they been to officiate, were to have performed, the very same, mass excepted, was done by the chorister and his canons, upon the eve and the holiday. The use of Sarum required also, that upon the eve of Innocent's day, the chorister-bishop, with his fellows, should go in solemn procession to the altar of the Holy Trinity, in copes, and with burning tapers in their hands; and that, during the procession, three of the boys should sing certain hymns, mentioned in the rubric. The procession was made through the great door at the west end of the church, in such order, that the dean and canons went foremost, the chaplain next, and the bishop, with his little prebendaries, last; agreeable to that rule in the ordering of all processions, which assigns the rearward station to the most honourable. In the choir was a seat or throne for the bishop: and as to the rest of the children, they were disposed on each side of the choir, upon the uppermost ascent. And so careful was the church to prevent any disorder which the rude curiosity of the multitude might occasion in the celebration of this singular ceremony, that their statutes forbid all persons whatsoever, under pain of the greater excommunication, to interrupt or press upon the children, either in the procession or during any part of the service directed by the rubric; or any way to hinder or interrupt them in the execution or performance of what it concerned them to do. Farther it appears, that this infant-bishop did, to a certain limit, receive to his own use, rents, capons, and other emoluments of the church.

In case the little bishop died within the month, his exequies were solemnized with great pomp: and he was interred, like other bishops, with all his ornaments. The memory of this custom is preserved, not only in the ritual books of the cathedral church of Salisbury, but by a monument in the same church, with the sepulchral effigies of a chorister-bishop, supposed to have died in the exercise of his pontifical office, and to have been interred with the solemnities above noted.

Such as is related in the foregoing was the Use of Sarum, which appears to have been no other than a certain mode of divine service, the ritual whereof, as also the several offices required in it, lie dispersed in the several books before enumerated. Whether the forms of devotion, or any thing else contained in these volumes, were so superlatively excellent, or of such importance to religion, as to justify the shedding of blood in order to extend the use of them, is left to the determination of those whom it may concern to enquire. It seems, however, that contentions of a like nature with this were very frequent in the early ages of Christianity; which were not less distinguished by the general ignorance that then prevailed, than by a want of urbanity in all ranks and orders of men. That general decorum, the effect

of long civilization, which is now observable in all the different countries of Europe, renders us unwilling to credit a fact, which nevertheless every person conversant in ecclesiastical history is acquainted with, and believes; namely, that the true time for celebrating Easter was the ground of a controversy that subsisted for some centuries, and occasioned great slaughter on both sides. The relation above given of the fray at Glastonbury, is not less reproachful to human nature, in any of the different views that may be taken of it; for if we consider the persons, they were men devoted to a religious life; if the place, it was the choir of a cathedral; and if the time, it was that of divine service. And yet we find that contentions of this kind were frequent; for at York, in 1190, there arose another: and Fox, who seems to exult in the remembrance of it, for no other reason than that both parties were, what at that time they could scarce choose but be, papists, has given the following ludicrous account of it:—

'The next yeere then ensued, which was 1190, in the beginning of which year, upon Twelfe even, fell a foule northerne brawle, which turned well neere to a fray, betwene the archbishop new elected, of the church of Yorke, and his company on the one side, and Henry, dean of the said church, with his catholike partakers on the other side, upon occasion as followeth: Gaufridus or Geoffry, sonne to king Henry the second, and brother to king Richard, whom the king had elected a little before to the archbishopricke of Yorke, upon the even of Epiphany, which we call Twelfe Day, was disposed to hear even-song with all solemnity in the cathedral church, having with him Hamon the chanter, with divers canons of the church, who tarrying something long, belike in adorning and attiring himselfe, in the meane while Henry the deane, and Bucardus the treasurer, disdainig to tarry his comming, with a bold courage lustily began their holy evensong with finging their psalmes, ruffling of descant, and merry piping of organs; thus this catholike even-song with as much devotion begun, as to God's high service proceeding, was now almost halfe complete, when as at length, they being in the midst of their mirth, commeth in the new elect with his traine and gardenians, all full of wrath and indignation, for that they durst be so bold, not waiting for him, to begin God's service, and so eftsoones commanded the quier to stay and hold their peace: the chanter likewise by vertue of his office commandeth the same; but the deane and treasurer on the other side willed them to proceed, and so they sung on and would not stint. Thus the one halfe crying against the other, the whole quier was in a rore: their finging was turned to scolding, their chanting to chiding, and if instead of the organs they had had a drum, I doubt they would have solefaed by the ears together.

'At last through the authority of the archbishop, and of the chanter, the quier began to surcease and give silence. Then the new elect, not contented with what had beene sung before, with certaine of the quier began the even-song new againe. The treasurer upon the same caused, by vertue of his office, the

'candles to be put out, whereby the even-song having no power further to proceed, was stopped forthwith for like as without the light and beames of the sunne there is nothing but darknesse in all the world, even so you must understand the pope's church can see to doe nothing without candle-light, albeit the sunne doe shine never so cleere and bright. This being so, the archbishop, thus disappointed on every side of his purpose, made a grievous plaint, declaring to the clergie and to the people what the deane and treasurer had done, and so upon the same, suspended both them and the church from all divine service, till they should make to him due satisfaction for their trespasses.

'The next day, which was the day of Epiphany, when all the people of the citie were assembled in the cathedral church, as their manner was, namely, in such feasts devoutly to hear divine service, as they call it, of the church, there was also present the archbishop and the chanter, with the residue of the clergie, looking when the deane and treasurer would come and submit themselves, making satisfaction for their crime. But they still continuing in their stoutnesse, refused so to do, exclaiming and uttering contemptuous words against the archbishop and his partakers; which when the people heard, they in a great rage would have fallen upon them: but the archbishop would not suffer that. The deane then, and his fellowes, perceiving the stir of the people, for feare, like pretie men, were faine to flee; some to the tombe of S. William of York, some ranne into the deane's house, and there shrouded themselves, whom the archbishop then accursed. And so for that day the people returned home without any service.'

In the year 1060 flourished HERMANNUS CONTRACTUS, so surnamed because of a contraction in his limbs, whom Vossius styles Comes Herengensis, a monk also of the monastery of St. Gal. He excelled in mathematics, and wrote two books of music, and one of the monochord.

MICHAEL PSELLUS, a Greek, and a most learned philosopher and physician, flourished about the year 1060, and during the reign of the emperor Constantinus Ducas, to whose son Michael he was preceptor. His works are but little known; for indeed few of his manuscripts have been printed. What intitles him to a place here, is a book of his, printed at Paris, in 1557, with this title, Michael Psellus de Arithmetica, Musica, Geometrica, et proclus de Sphæra, Elia Vineto Santone interprete. The name of this author has a place in almost every list of ancient musical writers to be met with; an honour which he seems to have but little claim to; for he has given no more on the subject of music than is contained in twenty pages of a loosely printed small octavo volume.

The several improvements of Guido hereinbefore enumerated, respected only the harmony of sounds, the

* Acts and Monuments, vol. I. pag. 305.

Gervase of Canterbury relates, that upon the second coronation of Richard I. after his release from captivity and return from the Holy Land, there was a like contention between the monks and clerks who assisted at that ceremony. 'Facta est autem altercatio inter monachos et clericos dum utrique Christus vincit cantarent.' X. Script. 1588. It is very probable that 'Christus vincit' was the beginning of a hymn composed in Palestine, after one of Richard's great victories. This contention was in 1194, four years after that above-mentioned.

reformation of the scale, and the means of rendering the practice of music more easily attainable; in a word, they all related to that branch of the musical science which among the ancients was distinguished by the name of *Melopoeia*; with the other, namely, the *Rythmopoeia*, it does not appear that he meddled at all. We nowhere in his writings meet with any thing that indicates a necessary diversity in the length or duration of the sounds, in order to constitute a regular cantus, nor consequently with any system or method of notation, calculated to express that difference of times or measures which is founded in nature, and is obvious to sense. If we judge from the *Micrologus* and other writings of that early period, it will seem, that in vocal music these were regulated solely by the cadence of the syllables: and that the instrumental music of those times was, in this respect, under no regulation at all.

Of the nature of the ancient *rythmopoeia* it is very difficult to form any other than a general idea. Isaac Vossius, who had bestowed great pains in his endeavours to restore it, at length gives it up as irretrievable. From him, however, we learn the nature and properties, or characteristics, of the several feet which occur in the composition of the different kinds of verse; and as to the *rythmus*, he describes it to the following effect:—

'*Rythmus* is the principal part of verse; but the term is differently understood by writers on the subject: with some, foot, metre, and *rythmus*, are considered as one and the same thing; and many attribute to metre that which belongs to *rythmus*. All the ancient Greeks assert, that *rythmus* is the basis or pace of verse; and others define it by saying, that it is a system or collection of feet, whose times bear to each other a certain ratio or proportion. The word Metre has a more limited signification, as relating solely to the quantity and measure of syllables. Varro calls metre, or feet, the substance or materials, and *rythmus* the rule of verse; and Plato, and many others, say, that none can be either a poet or a musician to whom the nature of the *rythmus* is unknown.'

After this general explanation of the *rythmus*, the same author, Vossius, enlarges upon its efficacy; indeed, he resolves the whole of its influence over the human mind into that which at best is but a part of music. The following are his sentiments on this matter:—*

'I cannot sufficiently admire those who have treated on music in this and the past age, and have endeavoured diligently to explain every other part, yet have written nothing concerning *rythmus*, or if they have, that they have written so that they seem entirely ignorant of the subject: the whole of them have been employed in *symphoniurgia*, or counterpoint, as they term it; neglecting that which is the principal in every cantus, and regarding nothing but to please the ear. Far be it from me to censure any of those who labour to improve music; but I cannot approve their consulting only the hearing, and neglecting that which alone can afford pleasure to the

'faculties of the soul; for as unity does not make number, so neither can sound alone, considered by itself, have any power, or if it has any, it is so small and trifling that it entirely escapes the sense. Can the collision of stones or pieces of wood, or even the percussion of a single chord, without number or *rythmus*, have any efficacy in moving the affections, when we feel nothing but an empty sound? and though we compound many sounds that are harmonical and concordant, yet we effect nothing; such an harmony of sounds may indeed please the ear, but as to the delight, it is no more than if we uttered unknown words, or such as have no signification. To affect the mind, it is necessary that the sound should indicate somewhat which the mind or intellect can comprehend; for a sound void of all meaning can excite no affections, since pleasure proceeds from perception, and we can neither love nor hate that which we are unacquainted with.'†

These are the sentiments of the above author on the *rythmic* faculty in general. With respect to the force and efficacy of numbers, and the use and application of particular feet, as the means of exciting different passions, he thus expresses himself:—

'If you would have the sound to be of any effect, you must endeavour to animate the cantus with such motions as may excite the images of the things you intend to express; in which if you succeed, you will find no difficulty in leading the affections whither you please: but in order to this, the musical feet are to be properly applied. The *pyrrichius* and *tribrachys* are adapted to express light and voluble motions, such as the dances of satyrs; the *spondeus*, and the still graver *molossus*, represent the grave and slow motions; soft and tender sentiments are excited by the *trochæus*, and sometimes by the *amphibrachys*, as that also has a broken and effeminate pace; the *iambus* is vehement and angry; the *anapæstus* is almost of the same nature, as it imitates warlike motions. If you would express any thing cheerful and pleasant, the *dactylus* is to be called in, which represents a kind of dancing motion; to express any thing hard or refractory, the *antispæstus* will help you; if you would have numbers to excite fury and madness, not only the *anapæstus* is at hand, but also the fourth *pæon*, which is still more powerful. In a word, whether you consider the simple or the compounded feet, you will in all of them find a peculiar force and efficacy; nor can any thing be imagined which may not be represented in the multiplicity of their motions.'‡

But notwithstanding the peculiar force and efficacy which this author would persuade us are inherent in the several metrical feet, he says, that it is now more than a thousand years since the power of exciting the affections by music has ceased; and that the knowledge and use of the *rythmus* is lost, which alone is capable of producing those effects which historians ascribe to music in general. This misfortune is by him attributed to that alteration in respect of its

† De Poematum Cantu et Viribus Rythmi, pag. 72.

‡ Ibid, pag. 74.

* De Poematum Cantu et Viribus Rythmi, pag. 5, et seq.

pronunciation, which the Greek, in common with other languages, has undergone; and to the introduction of a new prosody, concerning which he thus expresses himself:—

‘There remains to be considered prosody, the ratio of accents, which was not only the chief but nearly the sole cause of the destruction of the musical and poetical art; for with regard to the change made in the letters and diphthongs, the cantus of verse might have still subsisted entire, had not a new prosody entirely changed the ancient pronunciation; for while the affairs of Greece flourished, the ratio of prosody, and the accents, was quite different from what it was afterwards, not only the ancient grammarians testified, but even the term itself shows that prosody was employed about the cantus of words; and hence it may be easily collected, that it was formerly the province of musicians, and not of grammarians, to affix to poems the prosodical notes or characters. But as all speech is, as it were, a certain cantus, this term was transferred to the pronunciation of all words whatsoever, and the grammarians, at length, seized the opportunity of accommodating the musical accents to their own use, to show the times and quantities of syllables. The first grammarian that thus usurped the accents, if we may depend on Apollonius Arcadius, and other Greek writers, was Aristophanes the grammarian, about the time of Ptolemy Philopater, and Epiphanes. His scholar Aristarchus, following the footsteps of his master, increased the number of accents; and Dionysius the Thracian, a hearer of Aristarchus, prosecuted the same study, as did also those who succeeded him in the school of Alexandria. The ancient ratio of speaking remained till the times of the emperors Antonius and Commodus. How recent the custom, of affixing the accents to writing is, appears from this, that none are to be found on any marbles or coins, or in books of any kind, that are ancienter than a thousand years; and during that period which intervened between the time of Aristophanes the grammarian, and the commencement of that above-mentioned, namely, for the space of eight or nine centuries, the marks for the accents were applied by the grammarians to no other use than the instructing youth in the metrical art.*

CHAP. XXXIX.

WHAT marks or signatures were used by the ancient Greeks to express the different quantities of musical sounds, independent of the verse, or whether they had any at all, is not now known. Those characters contained in the introduction of Alpyus are evidently of another kind, as representing simply the several sounds in the great system, as they stand distinguished from each other by their several degrees of acuteness and gravity. Neither are we capable of understanding those scattered passages relating to the rythmus which are to be met with in Aristides Quintilianus, and other of the Greek harmonicians, published by Meibomius; nor do Porphyry, Manuel

Bryennius, or any other of their commentators, afford the means of explaining them: Ptolemy himself is silent on this head, and Dr. Wallis professes to know but little of the matter. In a word, if we may credit Vossius and a few others, who have either written professedly on, or occasionally adverted to, this subject, the rythmopoeia of the ancients is irrecoverably lost, and the numbers of modern poetry retain very little of that force and energy which are generally attributed to the compositions of the ancients: but, after all, it will be found very difficult to assign a period during which it can be said either that the common people were insensible of the efficacy of numbers, or that the learned had not some system by which they were to be regulated. Something like a metrical code subsisted in the writings of St. Austin and Bede, and, not to enquire minutely into the structure of the Runic poetry, or the songs of the bards, about which so much has been written, it is agreed that they were framed to regular measures. From all which it is certain, that at the period now speaking of, and long before, the public ear was conscious of a species of metrical harmony arising from a regular arrangement and interchange of long and short quantities; and that metre was considered as the basis of poetry in its least cultivated state. The want of this metrical harmony was not discernible in vocal music, because the sounds, in respect of their duration or continuance, were subservient to the verse, or as it may be said in other words, because the measure or cadence of the verse was communicated or transferred to the music. But this was an advantage peculiar to vocal music; as to instrumental, it was destitute of all extrinsic aid: in short, it was mere symphony, and as such was necessarily liable to the objection of a too great uniformity. From all which it is evident, that a system of metrical notation, which should give to mere melody the energy and force of metre, was wanting to the perfection of modern music.

Happily the world is now in possession of a system fully adequate to this end, and capable of denoting all the possible combinations of long and short quantities. The general opinion is, that the author of this improvement was Johannes de Muris, a doctor of the Sorbonne, about the year 1330, and considerably learned in the faculty of music; and this opinion has, for a series of years, been so implicitly acquiesced in, that not only no one has ventured to question the truth of it, but scarce a single writer on the subject of music since his time, has forborne to assert, in terms the most explicit, that Johannes de Muris was the inventor of the Cantus Mensuralis; that is to say, that kind of music, whether vocal or instrumental, which, in respect of the length or duration of its component sounds, is subject to rule and measure; or, in other words, that he invented the several characters for distinguishing between the quantities of long and short, as they relate to musical sounds. Against an opinion so well established as this seems to be, nothing can with propriety be opposed but fact; nor can it be expected that the authority of such men as Zarlino, Bontempi, Mersennus, and Kircher, should yield to an assertion

* De Poematum Cantu et Viribus Rythmi, pag. 17.

that tends to deprive a learned man of the honour of an ingenious discovery, unless it can be clearly proved to have been made and recognized before. Whether the evidence now to be adduced to prove that the *Cantus Mensurabilis* existed above two centuries before the time of De Muris, be less than sufficient for that purpose is submitted to the judgment of the candid and impartial enquirer.

And first it is to be remarked, that in the writings of some of the most ancient authors on music, the name of Franco occurs, particularly in the *Practica Musicæ utriusque Cantus* of Gaffurius, lib. II. cap. iv. where he is mentioned as having written on the characters used to signify the different lengths of notes, but without any circumstances that might lead to the period in which he lived. Passages also occur in sundry manuscript treatises now extant, which will hereafter be given at length, that speak him to have been deeply skilled in music, and which, with respect to the order of time, postpone the improvements of De Muris to certain very important ones, made by Franco. Farther, there is now extant a manuscript mentioned by Morley, in the *Annotations* on his *Introduction*, as old as the year 1326, which is no other than a commentary by one Robert de Handlo, on the subject of mensurable music.*

Authors are not agreed as to the precise time of De Muris's supposed invention, some fixing at 1330, others at 1333; but to take it at the soonest, De Handlo's *Commentary* was extant four years before; and how long it was written before that, no one can tell: it might have been many years. And still backward than that, must have been the time when those rules or maxims of Franco were framed, on which the treatise of De Handlo is professedly a commentary.

But all the difficulties touching the point of priority between these two writers, Franco and De Muris, have been removed by the care and industry of those learned Benedictines, the authors and compilers of the *Histoire Littéraire de la France*, who, in the eighth volume of that valuable work, have fixed the time when Franco flourished to the latter end of the eleventh century. They term him a scholastic of Liege; for as the first seminaries of learning in France were denominated schools, so the first teachers there, were called scholastics, and their style of address was *Magister*; and after distinguishing with great accuracy between him and three others of the same name, his contemporaries, they relate, that he lived at least to the year 1083. They say, that he wrote on music, particularly on plain chant; and that some of his treatises are yet to be found in the libraries of France. They farther say, that in that of the abbey De Lira, in Normandy, is a manuscript in folio, intitled, *Ars Magistri Franconis de Musica Mensurabili*. They mention also another manuscript in the Bodleian library, in six chapters, intitled, *Magistri Franconis Musica*; and another by the same author, contained in the same volume, intitled, *Compendium de Discantu, tribus capitibus*.

* Morl. Annot. on his *Introduct.* part I. where it is expressly said, that Franco first divided the breve into semibreves, and that one Robert de Handlo, i. e. Handlo, made as it were commentaries upon his rules.

These assertions, grounded on the testimony of sundry writers, whose names are cited for the purpose in the above work, preclude all doubt as to the merits of the question, and leave an obscure, though a learned writer, in possession of the honour of an invention, which, for want of the necessary intelligence, has for more than four hundred years been ascribed to another.

The same authors speak of Franco as a person profoundly skilled in the learning of his time; particularly in geometry, astronomy, and other branches of mathematical science, and in high esteem for the sanctity of his life and manners.

In the year 1074, under William the Conqueror, flourished in England OSBERN, a monk of Canterbury, and precentor in the choir of that cathedral:† he was greatly favoured by Lanfranc archbishop of that see. Trithemius, Bale, and Pits speak of him as a man profoundly skilled in the science of music. He left behind him a treatise *De Re Musica*; some add, that he wrote another on the consonances, but the general opinion is, that this and the former are one and the same work. Bale, who places him above a century backward than other writers do, making him to have been familiar with Dunstan, who was archbishop of Canterbury in 963, insinuates that Guido did but follow him in many of the improvements made by him in music: His words are, 'Osbernus, a monk of Canterbury, practysed newe poyntes of musyk; and his example in Italy folowed Guido Aretinus, to make,' as this candid writer asserts, 'the veneraycyon of ydolles more pleasaunt.'§

† In tracing the progress of choral music in this country, it is worthy of remark that as it was first established in the cathedral of Canterbury, where the first of the Roman singers settled on the conversion of the English to christianity; so that choir for a series of years produced a succession of men distinguished for their excellence in it. Among these Theodore, the archbishop, and Adrian, the abbot, his friend and coadjutor, are particularly noted; the former was of Tarsus, St. Paul's country, the latter an African by birth, and died in 708. Bede Hist. Eccl. lib. IV. cap. I. He was entombed in the above cathedral with this epitaph. *Weever's Funeral Monuments*, pag. 251.

Qui legis has aplice, Adriani pignora, dices
Hoc sita sarcophago sus nostro gloria pago.
Hic deus abbatum, patrie lux, vir probitatum
Subvenit a celo al corde rogetur anhele.

St. Aldhelm, abbot of Malmesbury, and afterwards bishop of Shireburn, received at Canterbury, from Theodore and Adrian, his knowledge of the Greek language, and was by them instructed in vocal and instrumental music. Camden [Brit. in Wilts. 104.] relates that he was the first of the Saxons that ever wrote in Latin; and that taught the method of composing Latin verse. An acrostic of his composition in that language, is preserved in Pits's account of him. Bishop Nicholson [Engl. Hist. lib. xii.] speaks of St. Aldhelm's hymns and other musical compositions, and laments that they are lost. Of this person many fabulous stories are told; and Bayle, who takes every occasion in his way to ridicule a virtue which some would suspect he did not possess, [Art. St. Francis] makes himself merry with the means he is said to have used to preserve the dominion of reason over his appetite. But Bede, who very probably was acquainted with him [Hist. Eccl. lib. V. cap. xix.] gives him the character of a learned and elegant writer; and Camden celebrates him for the sanctity of his life.

Fuller, in his *Worthies of Wiltshire*, 147, in his quaint manner, relates of him, that coming to Rome to be consecrated bishop of Sherburn, he reproved pope Sergius his fatherhood, for being a father indeed to a base child, then newly born. And that returning home he lived in great esteem until the day of his death, which happened anno Domini, 709. See more of him in Leland, Pits, and Tanner.

St. Dunstan is not less celebrated for his skill in music, than for his learning in the other sciences. Pits styles him 'Vir Græcæ Latineque doctus, et omnibus artibus liberalibus egregie instructus, musicus præsertim insignis, et statuarius non contemptendus;' and, by an egregious mistake of Dunstable for Dunstan, Mattheson of Hamburg has made him the inventor of music in parts, which some writers, particularly Johannes Nicius, in a tract entitled *Præceptiones Musicae Poeticæ, seu de Compositione Cantus*, quarto, 1613, with little foundation, have ascribed to John of Dunstable, a musician who flourished in the fifteenth century, and will be spoken of in his place.

§ The second Part, or *Contynuacyon* of the English *Votaries*, fol. 13, b.

Well might Fuller give this man the name of bilious Bale, who, though a protestant bishop, and a great pretender to sanctity, had not the least tincture of charity or moderation.

Under the emperor Henry III. in the diocese of Spire, lived GULIELMUS ABBAS HIRSAUGIENSIS.* He was esteemed the most learned man of his time in all Germany: he excelled in music, and wrote on the tones; he also wrote three books of philosophical and astronomical institutions, and one *De Horologia*. There are extant of his writing Letters to Anselm, archbishop of Canterbury. He died in 1091, with the reputation of having wrought many miracles.†

Of the writings of the several authors above enumerated, as they exist only in manuscript, no particular account can be given, nor are we able to form a judgment of their manner of treating music, otherwise than by the help of those few tracts which we know of, and which are deposited in collections accessible to every learned enquirer, and of these the chief are the *Enchiridion* of Odo; the *Epistle* from Berno to Pelegrinus, archbishop of Cologne; the *Argumentum novi Cantus inveniendi*; and the *Micrologus* and *Epistle* of Guido. The censure which Guido passes upon the treatise *De Musica* of Boetius, namely, that it is a work fitter for philosophers than singers, may serve to shew that the writers of those times meddled very little with the philosophy of the science: as to that branch of it, Boetius, who had thoroughly studied the ancients, was their oracle; and the monkish writers who succeeded him, looking upon music as subservient to the ends of religion, treated it altogether in a practical way, and united their efforts to preserve the music of the church in that state of purity from which it had so often and so widely deviated.

But how ineffectual all their endeavours were, appears from the writings of St. BERNARD, or, as he is otherwise called, St. Bernard the abbot. This man lived about the beginning of the twelfth century: his employments in the church having given him opportunities of remarking the great disorder and confusion of their music, arising, among other causes, from the manuscript multiplication of copies, he resolved to correct the antiphonary of his own order; and to prove the necessity of such a work, wrote a treatise entitled *De Cantu seu Correctione Antiphonarii*, containing a plan for the reformation of the Cistercian antiphonary, and an enumeration of all the errors that had crept into the holy offices, with directions for restoring them to their original elegance and purity.

Whatever was the cause of it, the reformation intended by St. Bernard did not take effect, so as to prevent future corruptions of the *Cantus Gregorianus*. The tract however is extant in the fourth tome of his works. Authors speak of it as an admirable composition, and seem to say that we owe to it all that with any certainty can now be said to be known touching the subject; part of it is as follows:—

‘The song which the churches belonging to the

‘Cistercian order have been accustomed to sing, although grave and full of variety, is overclouded with error and absurdity, and yet the authority of the order has given its errors a kind of sanction. But because it ill becomes men who profess to live together agreeably to the rule of their order, to sing the praises of God in an irregular manner, with the consent of the brethren I have corrected their song, by removing from it all that filth of falsity which foolish people had brought into it, and have regulated it so that it will be found more commodious for singing and notation than the song of other churches; wherefore let none wonder or be offended if he shall hear the song in somewhat another form than he has been accustomed to, or that he finds it altered in many respects; for in those places where any alterations occur, either the progression was irregular, or the composition itself perverted. That you may wonder at, and detest the folly of those who departing from the rules of melody, have taken the liberty to vary the method of singing, look into the antiphon, *Nos qui vivimus*, as it is commonly sung, and although its termination should be properly in D, yet these unjust prevaricators conclude it in G, and assert with an oath or wager that it belongs to the eighth tone. What musician, I pray you, can be able to hear with patience any one attribute to the eighth tone, that which has for its natural and proper final the note D?

‘Moreover, there are many songs which are twofold, and irregular; and that they ascend and descend contrary to rule is allowed by the very teachers of this error; but they say it is done by a kind of musical licence: what sort of licence is this, which walking in the region of dissimilitude, introduces confusion and uncertainty, the mother of presumption and the refuge of error? I say what is this liberty which joins opposites, and goes beyond natural land-marks; and which as it imposes an inelegance on the composition, offers an insult to nature; since it is as clear as the day that that song is badly and irregularly constituted, which is either so depressed that it cannot be heard, or so elevated that it cannot be rightly sung?

‘So that if we have performed a work that is singular or different from the practice of the singers of antiphons, we have yet this comfort, that reason has induced us to this difference, whereas chance, or somewhat else as bad, not reason, has made them to differ among themselves; and this difference of theirs is so great, that no two provinces sing the same antiphon alike: for to instance, in the provincial churches, take the antiphonary used at Rheims and compare it with that of Beauvais, or Amiens, or Soissons, which are almost at your doors, and see if they are the same, or even like each other.’

From the very great character given of St. Bernard, it should seem that his learning and judgment were not inferior to his zeal: the epistle above-cited, and his endeavours for a reformation of the abuses in church-music, show him to have been well skilled in the science; and it is but justice to his memory to say that he was one of the truest votaries of, and

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* Hirsau was an abbey in Germany.

† *Voss. de Scient. Mathem. cap. xxxv. § xii. cap. lx. § ix., cap. lxxi. § vii.*

strongest advocates for music, of any whom that age produced. The accounts extant of him speak him to have been born of noble and pious parents, at the village of Fontaines in Burgundy, in the year 1091. At the age of twenty-three he took the habit of a religious at Citeaux, from whence he was sent to the new-founded abbey of Clairvaux, of which he was the first abbot. The fame of his learning and sanctity occasioned such a resort to this house, that in a very short time no fewer than seven hundred novices became resident in it. His authority in the church was so great, that he was a common arbiter of the differences between the pope, the bishops, and the princes of those contentious times. By his advice Innocent II. was acknowledged sovereign pontiff, and by his management Victor the anti-pope, was induced to make a voluntary abdication of the pontificate, whereby an end was put to a schism in the church.

It was in the time of St. Bernard that Peter Abaelard flourished, a man not more famous for his theological writings, than remarkable for his unhappy amour with Heloissa, or Eloisa, of whom more will be said hereafter : he had advanced certain positions that were deemed heretical, and St. Bernard instituted and conducted a process against him, which ended in their condemnation. The story of Abaelard and Heloissa is well known, but the character of Abaelard is not generally understood ; and indeed his history is so connected with that of St. Bernard, that it would savour of affectation to decline giving an account of him in this place.

PETER ABÆLARD was born in a town called Palais, three leagues from Nantes ; having a great inclination to the study of philosophy from his youth, he left the place of his nativity, and after having studied at several schools, settled at Paris, and took for his master William of Champeaux, archdeacon of Paris, and the most celebrated professor of that time. Here a difference arose between Abaelard and the professor, upon which he left him ; and, first at Melun, and afterwards at Corbeil, set up for himself, and, in emulation of his master, taught publicly in the schools ; but his infirmities soon obliged him to seek the restoration of his health in his native air. Upon his recovery he returned to Paris, and finding that William of Champeaux had been promoted to a canonry of the church of St. Victor, and that he continued to profess in that city, he entered into a disputation with him, but was foiled, and quitted Paris. After this Abaelard studied divinity at Laon, under Anselm, canon and dean of that city ; and meaning to emulate his master, he there gave lectures in theology, but was silenced by an order which Anselm had procured for that purpose. From Laon, he removed to Paris, and there for some time remained in peace, explaining the holy scriptures, and by his labours, besides a considerable sum of money, acquired great reputation.

It happened that a canon of the church of Paris, named Fulbert, had a niece, a very beautiful young woman, and of fine parts, whom he had brought up from her infancy, her name was Heloissa. To assist her in her studies this wise uncle and guardian retained Abaelard, a handsome young man, and pos-

sessed of all those advantages which the study of the classics, and a genius for poetry, may be supposed to give him ; and, to mend the matter, took him to board in his house, investing him with so much power over the person of his fair pupil, that though she was twenty-two years of age, he was at liberty to correct her ; and by the actual use of the lash compel her to attend to his instructions ; the consequence of this engagement was, the pregnancy of Heloissa, and the flight of the two lovers into Abaelard's own country, where Heloissa was delivered of a son, who was baptized by the name of Astrolabius. To appease Fulbert, Abaelard brought back his niece to Paris and married her ; but as Abaelard was a priest, and had acquired a canonry in the church, which was not tenable by a husband, and complete reparation could not be made to Heloissa for the injury she had sustained without avoiding this preferment, the marriage was at her own request kept a secret, and she, to remove all suspicion, put on the habit of a nun, and retired to the monastery of Argenteuil. But all this would not pacify her uncle and other relations ; they seized and punished Abaelard by an amputation of those parts with which he had offended. Upon this he took a resolution to embrace a monastic life, and Heloissa was easily persuaded to sequester herself from the world ; they both became professed at the same time, he at St. Denys, and she at Argenteuil.

The letters from Abaelard to Heloissa after their retirement, extant in the original Latin, have been celebrated for their elegance and tenderness ; as to the Epistle from Eloisa of Mr. Pope, it is confessedly a creature of his own imagination, and though a very fine composition, the world perhaps might have done very well without it. With the licence allowed to poets, he has deviated a little from historical truth in suppressing the circumstance of Abaelard's subsequent marriage to his mistress, with a view to make her love to him the more refined, as not resulting from legal obligation : it may be that the supposition on which this argument is founded is fallacious, and the conclusion arising from it unwarranted by experience. But it is to be feared that by the reading this animated poem, fewer people have been made to think honourably and reverentially of the passion of love, than have become advocates for that fascinating species of it, which frequently terminates in concubinage, and which it is the drift of this epistle, if not to recommend, to justify.

But to leave this disquisition, and return to Abaelard : his disgrace, though it sank deeply into his mind, had less effect on his reputation than was to have been expected. He was a divine, and professed to teach the theology, such as it was, of those times ; persons of distinction resorted to St. Denys, and entreated of him lectures in their own houses. The abbot and religious of that monastery had lain themselves open to the censures and reproaches of Abaelard by their disorderly course of living, they made use of the importunity of the people to become his auditors as a pretext for sending him from amongst them. He set up a school in the town, and drew so many to hear

him, that the place was not sufficient to lodge, nor the country about it to feed them.

Here he composed sundry theological treatises, one in particular on the Trinity, for which he was convened before a council held at Soissons; the book was condemned to the flames, and the author sentenced to a perpetual residence within the walls of a monastery: after a few days confinement in the monastery of St. Medard at Soissons, he was sent back to his own of St. Denys: there he advanced that St. Denys of France was not the Areopagite; and by maintaining that proposition, incurred the enmity of the abbot and his religious brethren. Not thinking himself safe among them, he made his escape from that place in the night, and fled into the territories of Theobald, count of Champagne, and at Troyes, with the leave of the bishop, built a chapel in a field that had been given to him by the proprietor for that purpose. No sooner was he settled in this place, than he was followed by a great number of scholars, who for the convenience of hearing his lectures built cells around his dwelling: they also built a church for him, which was dedicated to the Holy Trinity, and by Abaelard called Paraclete. His enemies, exasperated at this establishment, and the prospect it afforded him of a quiet retreat from the tumult of the times, instigated St. Norbert and St. Bernard to arraign him on the two articles of faith and manners before the ecclesiastical judges. The duke of Bretagne, in pity to Abaelard, had offered him the abbacy of St. Gildas, of Ruis, in the diocese of Nantes, and in order to avert the consequences of so formidable an accusation, he accepted it; and the abbot of St. Denys having expelled the nuns from Argentuil, he bestowed on Helloissa, their prioress, the church of Paraclete with its dependencies; which donation was confirmed by the bishop of Troyes, and pope Innocent II. in 1131. But these endeavours of Abaelard did not avert the malice of his persecutors: Bernard had carefully read over two of his books, and selected from thence certain propositions, which seemed to bespeak their author at once an Arian, a Pelagian, and a Nestorian; and upon these he grounded his charge of heresy; Abaelard affecting rather to meet than decline it, procured Bernard to be convened before a council at Sens, in order, if he was able, to make it good; but his resolution failed him, and rather than abide the sentence of the council, he chose to appeal to Rome. The bishops in the council nevertheless proceeded to examine, and were unanimous in condemning his opinions; the pope was easily wrought upon to concur with them; he enjoined Abaelard a perpetual silence, and declared that the abettors of his doctrines deserved excommunication. Abaelard wrote a very submissive apology, disowning the bad sense that had been put upon his propositions, and set out for Rome in order to back it, but was stopped at Cluni by the venerable Peter, abbot of that monastery, his intimate friend; there he remained for some time, during which he found means to procure a reconciliation with St. Bernard. At length he was sent to the monastery of St. Marcellus, at Chalons upon the Soane, and,

overwhelmed with affliction, expired there in the year 1142, and in the sixty-third of his age.

Of this calamitous event Peter of Cluni gave Helloissa intelligence in a very pathetic letter, now extant: she had formerly requested of Abaelard, that whenever he died his body should be sent to Paraclete for interment; this charitable office Peter performed accordingly, and with the body sent an absolution of Abaelard 'ab omnibus peccatis suis.' *

Soon after Abaelard's death Peter made a visit to Paraclete, probably to console Helloissa: in a letter to him she acknowledges this act of friendship, and the honour he had done her of celebrating mass in the chapel of that monastery. She also commends to his care her son Astrolabius, then at the abbey of Cluni, and conjures him, by the love of God, to procure for him, either from the archbishop of Paris, or some other bishop, a prebend in the church.

The works of Abaelard were printed at Paris in 1616. His genius for poetry, and a few slight particulars that afford but a colour for such a supposition, induced the anonymous author of the History of Abaelard and Helloissa, published in Holland 1693, to ascribe to him the famous romance of the Rose; and to assert, that in the character of Beauty he has exhibited a picture of his Helloissa; but Bayle has made it sufficiently clear that that romance, excepting the conclusion, was written by William de Loris, and that John de Meun put the finishing hand to it. A collection of the letters of Abaelard and Helloissa, in octavo, was published from a manuscript in the Bodleian library, in the year 1718, by Mr. Rawlinson. As to the letters commonly imputed to them, and of which we have an English translation by Mr. Hughes, they were first published in French at the Hague in 1693; and in the opinion of Mr. Hughes himself are rather a paraphrase on, than a translation from, the original Latin. Even the celebrated Epistle of Mr. Pope, the most laboured and pathetic of all his juvenile compositions, falls far short of inspiring sentiments in any degree similar to those that breathe through the genuine epistles of this most eloquent and accomplished woman; nor does it seem possible to express that exquisite tenderness, that refined delicacy, that exalted piety, or that pungent contrition, which distinguishes these compositions, in any words but her own. †

* For a fuller account of him see Du Pin Biblioth. Eccles. Cent. XH. and the articles ABÆLARD, HELOÏSE, FOULQUES, and FULBERT, in Bayle.

† The profession of Abaelard, the condition of the monastic life to which he had devoted himself, and, above all, the course of his studies, naturally lead to an opinion that, notwithstanding his disastrous amour with Helloissa, the general tenour of his conduct was in other respects at least blameless, but on the contrary he appears to have been a man of a loose and profligate life. In a letter from one of his friends, Foulques, prior of Deuil, to him, he is charged with such a propensity to the conversation of lewd women, as reduced him to the want of even food and raiment. Bayle, art. FOULQUES, in not.

To say the truth, the theology of the schools, as taught in Abaelard's time, was merely scientific, and had as little tendency to regulate the manners of those who studied it as geometry, or any other of the mathematical sciences; and this is evident from the licentiousness of the clergy at this and the earlier periods of christianity, and the extreme rancour and bitterness which they discovered in all kinds of controversy.

Of the latter, the persecution of Abaelard by St. Bernard, and other his adversaries, is a proof; and for the former we have the testimony of the most credible and impartial of the ecclesiastical writers. Mosheim among other proofs of the degeneracy and licentiousness of the clergy in the tenth century, mentions the example of Theophylact, a Grecian patriarch, and on the authority of Fleury's Histoire Ecclesiastique,

But to return to St. Bernard; his labours for preserving the music of the church in its original purity, have deservedly intitled him to the character of one of its greatest patrons: the particulars of his life, which appears to have been a very busy one, are too numerous to be here inserted; but the ecclesiastical historians speak of him as one of the most shining lights of the age in which he lived. They speak also of another St. Bernard, at one time official, and afterwards abbot of the church of Pisa, a disciple of the former, and at last pope by the name of Eugenius III.

The works of St. Bernard the abbot are extant; the best edition of them is that of Mabillon, in two volumes, folio. Du Pin says that in his writings he did not affect the method of the scholastics of his time, but rather followed the manner of the preceding authors; for which reason he is deemed the last of the fathers. He died 1153, and left near one hundred and sixty monasteries of his order, which owed their foundation to his zeal and industry.

CHAP. XL.

THE establishment of schools and other seminaries of learning in France, particularly in Normandy, already mentioned in the course of this work, began now to be productive of great advantages to letters in general, for notwithstanding that the beginning of the twelfth century gave birth to a kind of new science, termed scholastic divinity, of which Peter Lombard Gilbert de la Poree and Abaelard are said to be the inventors, a new and more rational division of the sciences than is included in the Trivium and Quadrivium, was projected and took effect about this time.* In that division theology had no place, but was termed the queen of sciences; it was now added to the other seven, and assumed a form and character very different from what it had heretofore borne. It consisted no longer in those doctrines, which, without the least order or connection were deduced from passages in the holy scriptures, and were founded on the opinions of the fathers and primitive doctors;

lib. IV. pag. 97, relates the following curious particulars of him:—'This exemplary prelate, says he, who sold every ecclesiastical benefice as soon as it became vacant, had in his stable above two thousand hunting horses, which he fed with pignuts, pistachios, dates, dried grapes, figs steeped in the most exquisite wines, to all which he added the richest perfumes. One Holy Thursday he was celebrating high-mass, his groom brought him the joyful news that one of his favourite mares had foaled, upon which he threw down the liturgy, left the church, and ran in raptures to the stable, where having expressed his joy at that grand event, he returned to the altar to finish the divine service, which he had left interrupted during his absence.' Translation of Mosheim's Ecclesiastical History, by Dr. Maclane, octavo, 1768, vol. II. pag. 201, in not.

* It seems notwithstanding, that the distinctions of Trivium and Quadrivium subsisted as late as the time of Henry VIII. when it is probable they ceased; for Skelton, in that libel of his on cardinal Wolsey, entitled *Why come ye not to Court?* thus satirizes him for his ignorance of the seven liberal sciences:—

He was parde,
No doctour of diuinitie,
Nor doctour of the law,
Nor of none other saw,
But a pore maister of arte,
God wot had little part
Of the quadrivials,
Nor yet of trivials,
Nor of philosophie,
Nor of philology.

but was that philosophical or scholastic theology, which with the deepest abstraction pretended to trace divine truth to its first principles, and to pursue it from thence through all its various connections and branches. Into this system of divinity were introduced all the subtleties of logic and metaphysics, till the whole became a science of mere sophistry, and chicane, and unintelligible jargon, conducing neither to the real improvement of the rational faculties, or the promotion of religion or moral virtue. This system of divinity, such as it was, was however honoured with the name of a science, and added to the former seven; to this number were added jurisprudence and physic, taken in that limited sense in which the word is yet used; not as comprehending the study of nature and her operations; and hence arose the three professions of divinity, law, and physic. That the second of these was thus honoured, was owing in a great measure to an accident, the discovery, in the year 1137, of the original manuscript of the Pandects of Justinian, which had been lost for five hundred years, and was then recovered, of which fortunate event, to go no farther for evidence of it, Mr. Seldon gives the following account:—'The emperors from Justinian, who died 565, until Lotharius II. in the year 1125, so much neglected the body of the civil law, that all that time none ever professed it. But when the emperor Lotharius II. took Amalfi, he there found an old copy of the Pandects or Digests, which as a precious monument he gave to the Pisans, by reason whereof it was called *Litera Pisana*; from whence it hath been translated to Florence, &c., and is never brought forth but with torch-light, or other reverence.' Annotations on Fortescue de Laudibus, pag. 18, 19.

No sooner was the civil law placed in the number of the sciences, and considered as an important branch of academical learning, than the Roman pontiffs and their zealous adherents, judged it not only expedient, but also highly necessary, that the canon law should have the same privilege. There were not wanting before this time, certain collections of the canons or laws of the church; but these collections were so destitute of order and method, and were so defective, both in respect to matter and form, that they could not be conveniently explained in the schools, or be made use of as systems of ecclesiastical polity. Hence it was that Gratian, a Benedictine monk belonging to the convent of St. Felix and Nabor at Bologna, by birth a Tuscan, composed, about the year 1130, for the use of the schools, an abridgment or epitome of canon law, drawn from the letters of the pontiffs, decrees of councils, and writings of the ancient doctors. Pope Eugenius III. was extremely satisfied with this work, which was also received with the highest applause by the doctors and professors of Bologna, and was unanimously adopted as the text they were to follow in their public lectures. The professors at Paris were the first that followed the example of those of Bologna, which in process of time was imitated by the greatest part of the European colleges. But notwithstanding the encomiums bestowed upon this performance which was

commonly called the Decretal of Gratian, and was intitled by the author himself, the reunion or coalition of the jarring canons, several most learned and eminent writers of the Romish communion acknowledge it to be full of errors and defects of various kinds. However as the main design of this abridgment of the canons was to support the despotism, and to extend the authority of the Roman pontiffs, its innumerable defects were overlooked, its merits exaggerated, and, what is still more surprising, it enjoys at this day, in an age of light and liberty, that high degree of veneration and authority which was inconsiderately, though more excusably lavished upon it in an age of tyranny, superstition, and darkness.

Such among the Latins as were ambitious of making a figure in the republic of letters, applied themselves with the utmost zeal and diligence to the study of philosophy. Philosophy, taken in its most extensive and general meaning, comprehended, according to the method universally received towards the middle of this century, four classes, it was divided into theoretical, practical, mechanical, and logical. The first class comprehended theology, mathematics, and natural philosophy; in the second class were ranked ethics, œconomics, and politics; the third contained the arts more immediately subservient to the purposes of life, such as navigation, agriculture, hunting, &c. The fourth was divided into grammar and composition, the latter of which was farther subdivided into rhetoric, dialectic, and sophistry; and under the term dialectic was comprehended that part of metaphysics, which treats of general notions; this division was almost universally adopted: some indeed were for separating grammar and mechanics from philosophy, a notion highly condemned by others, who under the general term philosophy comprehended the whole circle of the sciences.

This new arrangement of the sciences can hardly be said to comprehend music, as it would be too much to suppose it included in the general division of mathematics; for notwithstanding its intimate connection with both arithmetic and geometry, it is very certain that at the time of which we are now speaking, it was cultivated with a view merely to practice, and the rendering the choral service to the utmost degree pompous and solemn; and there is no other head in the above division under which it could with propriety be arranged. We are told that in the time of Odo, abbot of Cluni, lectures were publicly read in the university of Paris on those parts of St. Augustine's writings that treat of music and the metre of verses; this fact is slightly mentioned in the *Menagiana*, tom. II. But the authors of the *Histoire Litteraire de la France* are more particular, for they say that in the tenth century music began to be cultivated in France with singular industry and attention; and that those great masters Remi d'Auxerre, Huchald de St. Amand, Gerbert, and Abbon, gave lectures on music in the public schools. But it seems that the subjects principally treated on in these their lectures had very little

connection with the theory of music. In short, their view in this method of institution was to render familiar the precepts of tonal and rythmical music; to lay down rules for the management, of the voice, and to facilitate and improve the practice of plain chant, which Charlemagne with so much difficulty had established in that part of his dominions.*

The reformation of the scale by Guido Aretinus, and the other improvements made by him, as also the invention of the *Cantus Mensurabilis* by Franco, were so many new accessions to musical science. It is very remarkable that the *Cantus Mensurabilis*, which was all that was wanting to render the system complete, was added by Franco, within sixty years after the improvement of it by Guido, and this, as it associated metrical with harmonical combinations, was productive of infinite variety, and afforded ample scope, not only for disquisition, but for the exercise of the powers of invention in musical composition.

But notwithstanding these and other advantages which the science derived from the labours of Guido and Franco, it is much to be questioned whether the improvements by them severally made, and especially those of the former, were in general embraced with that degree of ardour which the authors of the *Histoire Litteraire de la France* seem in many places of their work to intimate; at least it may be said that in this country it was some considerable time, perhaps near a century, before the method of notation, by points, commas, and such other marks as have hereinbefore been described, gave place to that invented by Guido; and for this assertion there is at least probable evidence in a manuscript now in the Bodleian library, thus described in the catalogue of Bodleian manuscripts, which makes part of the *Catalogi Librorum manuscriptorum*, printed at Oxford 1697, viz., No. 2558, 63. '*Codex elegantissimus scriptus qui Troparion appellatur: continet quippe tropos, sive hymnos sacros, viz., Alleluja. tractus, modulamina prosas per anni circulum in festos et dies Dominicos: omnia notis musicis antiquis superscripta.*'

The precise antiquity of this manuscript is now very difficult to be ascertained, and the rather as it appears to be written by different persons in a variety of hands and characters. There are three specimens of its contents, which for the particular purpose of inserting them, have with all possible exactness been traced off from the book itself. (See Appendix, No. 44.)

But upon a comparison of the character in which the words of these specimens are written, with many other ancient manuscripts, it seems clearly to be that of the twelfth century; and if so, it proves that the ancient method of notation was retained near a century after the time when Guido flourished.

It is farther to be observed, that the improvements

* The labours of Charlemagne to this end were not merely the effects of his zeal, for he entertained a great love for music, and was himself skilled in it. In the university of Paris, founded by him, and in other parts of his dominions, he endowed schools for the study and practice of music; at church he always sang his part in the choral service, and he exhorted other princes to do the same. He was very desirous also that his daughters should attain a proficiency in singing, and to that end had masters to instruct them three hours every day.

of Guido and Franco were at first received only by the Latin church, and that it was many centuries before they were acquiesced in by that of the Greeks: an inference to this purpose might possibly be drawn from a passage in the letter of Dr. Wallis above-cited, in which, after giving his opinion of the Greek ritual therein mentioned, he conjectures it to be at least three hundred years old; but it is a matter beyond a doubt that the ancient method of notation above spoken of, was retained by the Greek church so low down as to near the middle of the seventeenth century. In the library of Jesus college, Oxon, is a manuscript with this title in a modern character, perhaps the handwriting of some librarian who had the custody of it, viz., 'Meletius Monachus de Musica Ecclesiastica, cum variorum Poetarum sacrorum Canticiis,' purporting to be the precepts of choral service, and a collection of offices used in the Greek church, in Greek characters, with such musical notes as are above-mentioned. As to Meletius, he appears clearly to be the writer and not the composer, either of the poetry or the music of these hymns; for besides that the colophon of the manuscript indicates most clearly that it was written and corrected with the hand of Meletius himself, the names of the several persons who composed the tunes or melodies as they occur in the course of the book, are regularly subjoined to each.

The name of Meletius appears in the catalogue of the Medicean library; and tom. III. pag. 167 thereof he is styled 'Monachus Monasterii SS. Trinitatis apud Tiberiopolim in Phrygia Majore, incertæ ætatis;' notwithstanding which the time of his writing this manuscript is by himself, and in his own handwriting, most precisely ascertained, as hereafter will be made to appear.

As to the contents of the book, it may suffice to say in general that it is a transcript of a great variety of hymns, psalms, and other offices, that is to say, the words in black, and the musical notes in red characters. In a leaf preceding the title is a portrait of an ecclesiastic, probably that of Meletius himself.

Then follows the transcriber's title, which is in red characters, and is to this effect, 'Instructions for Singing in the Church, collected from the ancient and modern Musicians;' these instructions seem to presuppose a knowledge of the rudiments of music in the reader, and for the most part are meant to declare what melodies are proper to the several offices as they occur in the course of the service, and to ascertain the number of syllables to each note. We have given a specimen of a hymn (See Appendix, No. 43), the words whereof have a close resemblance to those in the Harleian MS. above spoken of, as will appear by a comparison one with the other.

To the offices are subjoined the names of the persons who severally composed the melodies; among these the following most frequently occur, Joannes Lampadarius, Mannel Chrisaphus, Joasaphi Kukulzelus, Johannes Kukulzeli, Demetrius Redestes, Johannes Damascenus,* Poletikes, Johannes Lascars,

* Johannes Damascenus is celebrated by Du Pin as a subtle divine, a clear and methodical writer, and able compiler. The account given of him by this author in his Bibliothèque, cent. VIII. contains not the least

Georgius Staupoulus, Arsenius Monachus, probably he that was afterwards patriarch of Constantinople under Theodore Lascars the younger, in 1255, Elias Chrysaphes, Theodulus, Gerasimus, Agalleanus, Anthimus, Xachialus, Clemens Monachus, Agioretas.

The specimen given from the above-mentioned curious manuscript is inserted with a view to determine a very important question, namely, what were the musical characters in use among the modern Greeks: if any circumstance is wanting to complete the evidence that they were those above represented, it can only be the age in which Meletius lived: but this is ascertained by the colophon of the MS. which is to this effect:—'This book was wrote and corrected by me Meletius, a monk and presbyter, in the year of our Lord 1635.'†

JOHANNES SARISBURIENSIS, a very learned and polite scholar of the twelfth century, has a place in Walther's Catalogue of musical writers: he was a

intimation that he was better acquainted with music than others of his profession; nevertheless a very learned and excellent musician of this century, Mattheson of Hamburg, in his *Volkommenen Capellmeister*, Hamburg, 1739, pag. 26, asserts that he was not only very well skilled in it, but that he obtained the appellation of *Μελωδός*, *Melodos*, by reason of his excellent singing, and also for his having composed those fine melodies to which the Psalms are usually sung in the eastern churches. He flourished in the eighth century; and in the account which Du Pin has given of him, some of the most remarkable particulars are, that he being counsellor of state to the caliph of the Saracens, who resided at Damascus, and having discovered a seal for image-worship, the emperor Leo Isauricus, a great enemy to images, procured a person to counterfeit the writing of Damascenus in a letter to the caliph, purporting no less than a design to betray the city of Damascus into the hands of Leo, which wrought such an effect, that Damascenus was sentenced to lose his right hand, which was cut off accordingly, and exposed on a gibbet to the view of all the citizens. Du Pin adds, that if we believe the author of St. John Damascene's life, his hand was reunited to his arm by a miracle, for that as soon as it was cut off he begged it of the caliph, and immediately retiring to his dwelling, applied it to the wrist from whence it had been cut, and prostrating himself before an image of the Virgin, besought her to unite it to his arm, which petition she granted. As soon as he had received the benefit of this miracle, he retired from the court of the caliph to the monastery of St. Sabas at Jerusalem, and applied himself to the study of music, and very probably to the composition of those very melodies which have rendered his name so famous. He died about the year 750, having some few years before been ordained priest by the patriarch of Jerusalem.

† It is highly probable that this method of notation continued to be practised by the modern Greeks till within these few years; at least it seems to have been in use at the time of publishing a tract entitled *Balilioferus*, or a Commentary upon the foundation, Founders, and Affairs of Balliol College, Oxon, by Henry Savage, Master of the said College, quarto, Oxford, 1668, in which, pag. 121, is the following article:—

'Nathaniel Conopius was a Cretan born, and trained up in the Greek church; he became *Πρωτόψαλλος*, or *Primos*, to the aforesaid Cyril, patriarch of Constantinople; upon the strangling of whom by the vizir, the Grand Seigneur of the Turks being not then returned from the siege of Babylon, he fled over, and came into England, addressing himself with credentials from the English agent in Constantinople to the lord archbishop of Canterbury, Laud, who allowed him maintenance in this college, where he took on himself the degree of bachelor of divinity about anno 1642. And lastly, being returned home, he became bishop of Smyrna. He spoke and wrote the genuine Greek, for which he was had in great veneration in his country, others using the vulgar only; which must be understood of prose too, for poetical Greek he had not, but what he learned here. As for his writing, I have seen a great book of music, as he said of his own composing; for his skill wherein his countrymen, in their letters to him, stiled him *μουσικῶταρον*; but the notes are such as are not in use with, or understood by, any of the western churches.'

The author from whom the above account is taken was personally intimate with Conopius, and adds that he had often heard him sing a melody, which, in the book above-cited he has rendered in modern musical characters. Wood has taken notice of this person, *Athen. Oxon.* 1140, and relates that while he continued in Balliol college he made the drink for his own use called coffee, and usually drank it every morning, being the first, as the ancients of the house had informed him, that was ever drank in Oxon. Wood, in the account of his life written by himself, pag. 65, 80, says that in 1650, a Jew, named Cirques Jobson, born near Mount Libanus, opened a coffee-house in Oxford, between Edmund hall and Queen's college corner, and that after remaining there some time, he removed to London, and sold it in Southampton-buildings, Holborn, and was living there in 1671. More of Conopius may be seen in the Epistles of Gerard John Vossius, part II. pag. 145.

native of England, being born, as his name imports, at Salisbury, and about the year 1110. At the age of seventeen he went into France, and some years afterwards was honoured with a commission from the king his master, to reside near Pope Eugenius, and attend to the interests of his country; being returned to England he received great marks of friendship and esteem from Becket, then lord chancellor, and became an assistant to him in the discharge of that office. It is said that Becket took the advice of Johannes Sarisburiensis about the education of the king's eldest son, and many young noble English lords, whom he had undertaken to instruct in learning and good manners; and that he committed to him the care of his domestic concerns whilst he was abroad in Guienne with king Henry II. Upon Becket's promotion to the see of Canterbury, Sarisburiensis went to reside with him in his diocese, and retained such a sense of his obligation to him, that when that prelate was murdered, he intercepted a blow which one of the assassins aimed at the head of his master, and received a wound on his arm, so great, that after a twelvemonth's attendance on him, his surgeons despaired of healing it; at length however he was cured, and in the year 1179, at the earnest entreaty of the province, was made bishop of Chartres, upon which he went to reside there, and lived an example of that modesty and virtue which he had preached and recommended in his writings. He enjoyed this dignity but three years, for he died 1182, and was interred in the church of Notre Dame da Josaphat. Leland professes to discover in him 'Omnem scientiæ orbem;' and Bale, Cent. III. No. 1., celebrates him as an excellent Greek and Latin scholar, musician, mathematician, philosopher, and divine. Among other books he composed a treatise in Latin, entitled *Polycraticus, sive de Nugis Curialium et Vestigiis Philosophorum*, the sixth chapter of the first book whereof is entitled *De Musica et Instrumentis, et Modis et Fructu eorum*, and is a brief but very ingenious dissertation on the subject; and as to the book in general, notwithstanding the censure of Lipsius, who calls it a patch-work, containing many pieces of purple, intermixed with fragments of a better age, it may be truly said that it is a learned, curious, and very entertaining work; and of this opinion Du Pin seems to be in the following character which he has given of it:—'This is an excellent book relating to the employments, the duties, the virtues, and vices of great men, and especially of princes and great lords, and contains a great many moral thoughts, sentences, fine passages of authors, examples, apologues, pieces of history, and common topics.*' It was first printed by Constantine Frandinus, at Paris, in 1513, in a small octavo size.

CHAP. XLI.

CONRADUS, a monk of the abbey of Hirsangia, in Germany, and therefore surnamed Hirsaurgiensis, flourished about 1140, under the emperor Conrad III., whom the historians and chronologers place between

Conrade II. and Frederick Barbarossa. He was a philosopher, rhetorician, musician, and poet; and, among other things, was author of a book on music and the tones.†

ADAMUS DORENSIS, Adam of Dore, Door, or Dowlr, from the British Dûr, the site of an abbey in Herefordshire, is much celebrated for his learning, and particularly for his skill in the science of music. The following is the sum of the account which Bale, Pits, and other biographical writers give of him:—'Adam of Dore, a man of great note, was educated in the abbey of Dore, and very profitably spent his younger years in the study of the liberal sciences. He was a lover of poetry, philosophy, and music, attaining to great perfection in all; to these accomplishments he added piety, and strict regularity of life, and made such proficiency in all kinds of virtue, that for his great merit he was elected abbot of the monastery of Dore. In his time there were great contentions between the seculars and the monks; upon which occasion Sylvester Girald, a learned man, and of great eminence among the clergy, ‡ wrote a book entitled *Speculum Ecclesiæ*, in which he charged the regulars with avarice and lust, not sparing even the Cistercian monks. Adam, to vindicate the honour of the religious, and especially those of his own order, wrote a book against the *Speculum* of Girald; he wrote also a Treatise on the Elements of Music, and some other things, particularly satires, bitter ones enough, against Simon Ashe, a canon of Hereford, Sylvester Girald's advocate and friend. This Adam flourished in 1200, under King John. §

ALBERTUS MAGNUS was born about the year of Christ 1200: a man illustrious by his birth, but more for his deep and extensive learning; he was descended from the dukes of Schawben, and taught at Paris and Cologne; Thomas Aquinas was his disciple. In 1260 he was elected bishop of Ratisbon, but at the end of three years resigned his bishopric, and returned to his cell at Cologne. In 1274 he assisted at the council of Lyons, in quality of ambassador from the emperor. He left many monuments of his genius and learning, and has treated the subjects of arithmetic, geometry, astronomy, perspective, or optics, and music, in a manner worthy of admiration. It is said that he had the secret of transmutation, and that by means of that art he discharged all the debts of his bishopric of Ratisbon within the three years that he continued to hold it. Some have gone farther, and charged him with being a magician; as a proof whereof they relate that he had formed a machine in the shape of a man, which he resorted to as an oracle for the explanation of all difficulties that occurred to him: they say that he wrought thirty years without interruption in forging this wonderful figure, which Naudeus calls the Androis of Albertus, and that the several parts of it were formed under particular aspects and constellations; but that Thomas

† Vossius, de Scient. Math. cap. lx. § 10.

‡ Otherwise called Giraldus Cambrensis. Tann. Bibl. in Art. He was the author of the tract entitled *Cambriz Descriptio*, cited in book IV chap. 33.

§ Tann. Biblioth. Gibson's view of the churches of Door and Hom Lacy, Lond. quarto, pag. 15.

* Bibl. des Auteurs Eccl. cent. XII.

Aquinas, the disciple of Albertus, not being able to bear its everlasting tittle-tattle, broke it to pieces, and that too in his master's house. The general ignorance of mankind at different periods has exposed many a learned man to an imputation of the like sort; pope Sylvester II., Robert Grossthead,* bishop of Lincoln, and Roger Bacon, if we may believe some writers, had each a brazen head of his own making, which they consulted upon all difficulties. Naudeus has exposed the folly of this notion in an elaborate apology for these and other great men whose memories have been thus injured; and though he admits that Albertus might possibly have in his possession a head, or statue of a man, so ingeniously contrived, as that the air which was blown into it might receive the modifications requisite to form a human voice; he denies that any magical power whatever was necessary for the construction of it. Albertus died at Cologne in the year 1280; his body was interred in the choir of the church of the Dominican convent there, and was found entire in the time of the emperor Charles V. Although his learning and abilities had acquired him the epithet of Great, it is related that he was in his person so very little a man, that when upon his arrival at Rome he kissed the feet of the pope, his holiness, after he had risen up, thinking he was yet on his knees, commanded him to stand. The number of books which he wrote is prodigious, for they amount to twenty-one volumes in folio.†

GREGORY of Bridlington, a canon regular of the order of St. Augustine, precentor of the church of his monastery of Bridlington, and afterwards prior thereof, flourished about the year 1217. He wrote a Treatise De Arte Musices, in three books, and is mentioned by bishop Tanner as a man of learning and abilities.

GUALTERUS ODINGTONUS, otherwise Walter of Evesham, a writer of great skill in the science of music, was a Benedictine monk, he flourished in the reign of our Henry III. about the year 1240. Bishop Tanner, on the authority of Pits, Bale, and Leland, gives him the character of a very learned man; and Fuller has celebrated him among the worthies of Worcestershire. Tanner‡ refers to a manuscript treatise of his in the library of Christ Church college Cambridge intitled *De Speculatione Musices*, in six books, beginning '*Plura quam digna de musicæ specula*;' and in a manuscript collection of tracts in the Cotton library, Tiberius, B. IX. tract 3, is a treatise of the notes or musical characters, and their different properties, in which the long, the large, the breve, the semibreve, and the minim,

are particularly characterised; at the end of this treatise we have these words, '*Hæc Odyngtonus*,' plainly intimating that the writer, whoever he was, looked upon Gualterus Odyngtonus as the author of it; but there is great reason to suspect that it is not genuine, for the initial sentence does not agree with that of the tract *De Speculatione Musices*, as given by Tanner; and it is expressly asserted by Morley that the minim was invented by Philippus de Vitriaco, a famous composer of motets, who must have lived long after Walter. Mr. Stephens, the translator and continuator of Dugdale's *Monasticon*, in his catalogue of English learned men of the order of St. Benedict, gives the following account of this person:—

'Walter, monk of Evesham, a man of facetious wit, who applying himself to literature, lest he should sink under the labour of the day, the watching at night, and continual observance of regular discipline, used at spare hours to divert himself with the decent and commendable diversion of musick, to render himself the more chearful for other duties; whether at length this drew him off from other studies I know not, but there appears no other work of his than a piece intitled *Of the Speculation of Musick*. He flourished in 1240.'

VINCENTIUS, archbishop of Beauvois, in France, about the year 1250, was in great repute. He was a native of Burgundy, and treated of the science of music in his *Doctrinale*.

ROGER BACON, a monk of the Franciscan order, born at Ilchester, in Somersetshire, in 1214, the great luminary of the thirteenth century, a celebrated mathematician and philosopher, as appears by his voluminous writings in almost all branches of science, and the testimony of the learned in every age, wrote a treatise *De Valore Musices*. He died about the year 1292. He was greatly favoured by Robert Grossthead, bishop of Lincoln, and underwent the common fate of learned men in those times, of being accounted by the vulgar a magician. The story of friar Bacon's brazen head is well known, and is too silly to merit a refutation. There is an excellent life of him in the *Biographia Britannica*, written, as it is said, by Dr. Campbell.

SIMON TAILLER, a Dominican and a Scotsman, mentioned by Tanner, flourished about the year 1240. He wrote *De Cantu Ecclesiastico* reformed, *De Tenore Musicali*, and two other tracts, the one intitled *Tetrachordum*, and the other *Pentachordum*.

JOMANNES PEDIASIMUS, a native of Bulgaria, a lawyer by profession, and keeper of the patriarchal seal there, is reckoned in the number of musical writers. He flourished about the year 1300, and wrote a *Compendium of Geometry* and a book of the dimensions of the earth; the first is in the library of the most christian king, the latter, and also a *Treatise on the Science of Music*, in that of the city of Augsburg in Germany.§

Pope JOHN XXII. has a place among the writers on music, but for what reason it is somewhat difficult to shew; Du Pin, who speaks of him among the

* '—of the great clerk Grosstest
'I rede, howe busy that he was
'Upon the clergie an head of bras
'To forge, and make it for to telle
'Of such things as befelle:
'And seven yeres befineffe
'He laide, but for the lacheffe
'Of half a minute of an houre,
'Fro first he began to laboure,
'He lofte all that he had do.'

Gower. *Confessio Amantis*, fol. lxxiv.

† Bayle, in art.

‡ Bibliotheca, pag. 558.

§ Vossius, *De Scient. Mathem. cap. liv. § 16.*

ecclesiastical writers of the fourteenth century, says he was ingenious, and well versed in the sciences;* but by the catalogue of his works in the chronological table for that period, it seems that his chief excellence was his skill in the canon law; nevertheless he is taken notice of by Brossard and Walther, as having written on music; and in the *Micrologus* of Andreas Ornithoparcus, who wrote about the year 1535, a treatise of music of his writing is frequently referred to; and in the second chapter of the first book of the *Micrologus*, where the author professes to distinguish between a musician and a singer, he cites a passage from pope John XXII. to this effect: 'To whom shall I compare a cantor better than a drunkard (which indeed goeth home) but by what path he cannot tell? A musician to a cantor is as a prætor to a cryer.' And in the seventh chapter of the same book he cites him to explain the meaning of the word *Tone*: 'A tone, says he, is the distance of one voyce from another by a perfect sound, sounding strongly, so called à tonando, that is thundering; for tonare [as Johannes Pontifex XXII. cap. viii. saith] signifieth to thunder powerfully.'

The same author, lib. I. cap. iii. on the authority of Franchinus, though the passage as referred to by him is not to be found, asserts that pope John and Guido, after Boetius, are to be looked on as the most excellent musicians.

It is said that John was the son of a shoemaker of Cahors, and that on account of his excellence in literature Charles II., king of Naples, appointed him preceptor to his son; that from thence he rose to the purple, and at length to the papacy, being elected thereto anno 1316.

The particulars herein before enumerated respecting the progress of music from the time of its introduction into the church-service to about the middle of the thirteenth century; as also the accounts herein before given of the most eminent writers on music during that period, are sufficient to shew, not only that a knowledge of the principles of harmony and the rudiments of singing were deemed a necessary part of the clerical institution, but also that the clergy were by much the most able proficient, as well in instrumental as vocal music, for this very obvious reason, that in those times to sing was as much the duty of a clerk, or as we should now call him, a clergyman, as at this day it is for such a one to read: nevertheless it cannot be supposed but that music, to a certain degree, was known also to the laity; and that the mirth, good humour, and gaiety of the common people, especially the youthful of both sexes, discovered itself in the singing of such songs and ballads as suited with their conceptions and characters, and are the natural effusions of mirth and pleasantry in every age and country. But of these it is not easy to give a full and satisfactory account: the histories of those times being little more than brief and cursory relations of public events, or partial representations of the actions and characters of princes and other great men, who had recommended them-

selves to the clergy by their munificence; seldom descending to particulars, and affording very little of that kind of intelligence from whence the manners, the humours, and particular customs of any given age or people are to be collected or inferred. Of these the histories contained in that valuable collection entitled the *Decem Scriptores*, not to mention the rhyming *Chronicles* of Robert of Gloucester, Peter Langtoft, and others, are instances.

An enquiry into the origin of those rhyming chronicles, of which the two histories last above-mentioned are a specimen, will lead us to that source from whence, in all probability, the songs and ballads of succeeding times were deduced: so early as the time of Charlemagne, who lived in the eighth century, that species of rhyming Latin poetry called *Leonine verse*, was the admiration and delight of men of letters; but subsequent to his time, that is to say about the end of the tenth century, there sprang up in Provence certain professions of men called *Tropbadours*, or *Trouverres*, *Jongleurs*, *Cantadours*, *Violars*, and *Musars*, in whom the faculties both of music and poetry seemed to concentrate: the first of these were so denominated from the art which they professed of inventing or finding out, as well subjects and sentiments as rhymes, constituting what at that time was deemed poetry. The *Jongleurs* are supposed to have taken their name from some musical instrument on which they played, probably of a name resembling in its sound that by which their profession was distinguished. The *Cantadours*, called also *Chanterres*, were clearly singers of songs and ballads, as were also the *Musars*; and the *Violars* were as certainly players on the viol, an instrument of greater antiquity than is generally imagined.

Of the ancient writers of romance a history is extant in the lives of the Provençal poets, written in French by Johannes Nostradamus;† but a much more satisfactory account of them is contained in the translation thereof into Italian, with great additions thereto, by Gio. Mario de Crescimbeni, and by him published with the title of *Commentari intorno all' Istoria della volgare Poesia*. Of the origin of these, and particularly of the *Jongleurs* or *Jugleurs*, with the rest of the class above-mentioned, he gives a very curious relation in the fifth book, cap. v. of his work above-mentioned, to the following effect:—

'After having remarked that from Provence the Italians derived not only the origin and art of writing romances, but also the very subjects on which they were founded, it will not be disagreeable to the reader, before we proceed to speak of our

† The lives of the Provençal poets were written by an ecclesiastic of the noble family of Cibo in Genoa, who is distinguished by the fantastical name of the Monk of the Golden Islands, and lived about the year 1243; another person, an ecclesiastic also, named Ugo di Sancesario, and a native of Provence, who flourished about the year 1435, compiled the lives of the poets of his country. From the collections made by these two persons, Johannes Nostradamus, the younger brother of Michael Nostradamus the astrologer and pretended prophet, compiled and published at Lyons, in 1575, the lives of the ancient poets of Provence. This book Giovanni Mario de Crescimbeni translated into Italian, and published with the addition of many new lives, and a commentary containing historical notes and critical observations, in the year 1710. A very good judge of Italian literature, Mr. Baretti, says of this work of Crescimbeni that a true poet will find it a book very delightful to read. Italian Library, pag. 192.

* Biblioth. des Auteurs ecclesiastiques, t. vi. XIV.

'own, to say somewhat of the romance writers, as 'well of France in general, as of Provence, particularly as to their exercises and manner of living. 'It is not known precisely who were the romance 'writers of Provence, for authors that mention them 'speak only in general; nor have we seen any romances with the author's name, other than that of 'the Rose, begun by William de Lorry, and finished 'by John de Meun, as may be seen in a very old 'copy on parchment in the library of Cardinal 'Ottoni.

'Some of their romances however may be met with 'in many of the famous Italian libraries; and besides 'that of the Round Table, and that of Turpin, Du 'Cange, Huetius, and Fauchet, before them mention 'several, such as Garilla, Locran, Tristram, Launcelot 'of the Lake, Bertram, Sangreale, Merlin, Arthur, 'Perceval, Perceforest, Triel Ulespieghe, Rinaldo, 'and Roncisville, that very likely have been the 'foundation of many of those written by our Italians.

'These romances no doubt were sung, and perhaps 'Rossi, after Malatesta Porta, was not mistaken when 'he thought that the romance singers were used to 'sell their works on a stage as they were singing; 'for in those times there was in vogue a famous art 'in France called *Arte de Juglari*: these juglers, 'who were men of a comical turn, full of jests and 'arch sayings, and went about singing their verses 'in courts, and in the houses of noblemen, with a viol 'and a harp, or some other instrument, had besides 'a particular dress like that of our Pierrots in com- 'mon plays, not adapted to the quality of the subject 'they were singing (like the ancient rhapsodists, who, 'when they sung the *Odyssey*, were dressed in blue, 'because they celebrated Ulysses's heroes that were 'his companions in his voyages; and when they re- 'peated the *Illiad* they appeared generally in red, to 'give an idea of the vast quantity of blood spilt at 'the siege of Troy) but for the sake of entertaining 'and pleasing in a burlesque manner their protectors 'and masters, for which reason they were called 'Juglers, quasi Jocolatores, as the learned Menage 'very rightly conjectures.

'Many of the Provençal poets were used to practice 'the same art, and also our Italians, who composed 'verses in that language; for we read in the Vatican 'manuscripts, that Elias de Bariols, a Genoese, to- 'gether with one Olivieri, went to the court of count 'Amos de Provence as juglers, and thence passed 'into Sicily. Ugo della Penno, and Guglielmo della 'Torre, exercised the same profession in Lombardy; 'and cardinal Peter de Veillac, whenever he went to 'visit a king or a baron, which happened very often, 'was always accompanied by juglers, who sang the 'songs called in those places *Serventesi*. Besides 'those enumerated by Nostradamus, Alessandro 'Velutello reckons up many others, who travelled 'about and subsisted by the profession of minstrelsy, 'the nature whereof is described by Andrew Du 'Chesne, in his notes on the works of Alain Chartier,*

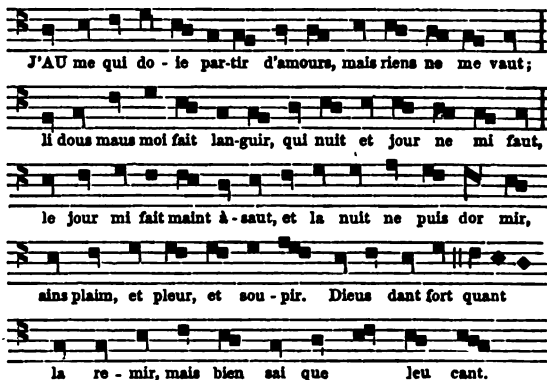
* Alain Chartier was born in 1386, and died about 1458. Crescim. in loc. cit.

'where he cites from a romance written in the year '1230, the following lines:—

'Quand les tables ostées furent,
'C'il Juggleur in pies esturent,
'S'ont vielles et harpes prises,
'Chansons, sons, vers, et reprises.
'Et de gestes chanté nos ont.

When the tables were taken away,
The juglers stood up,
Took their lyres, and harps;
Songs, tunes, verses, and catches,
And exploits they sang to us.

'It is not our intention to enquire what sort of 'music they made use of, but however, in order to 'satisfy the reader's curiosity, we shall say that it 'must have been very simple and plain, not to say 'rough, as may be seen by a manuscript in the Vatican 'library, in characters of the fourteenth century, 'where there are written the songs of divers Pro- 'vençal poets, with the music. We have copied the 'following example, which is the song of Theobald, 'king of Navarre, who flourished about the year 1235, 'no less celebrated among monarchs than poets, by 'the honourable praises bestowed on him by Dante 'in his *Inferno*, cant. xxii:—



J'AU me qui do - le par-tir d'amour, mais riens ne me vaut;
Il dous maus moi fait lan-guir, qui nuit et jour ne mi fait,
le jour mi fait maint à -saut, et la nuit ne puis dor mir,
ains plain, et pleur, et sou - pir. Dieus dant fort quant
la re - mir, mais bien sai que leu cant.

The Provençal poets were not only the inventors and composers of metrical romances, songs, ballads and rhymes, to so great a number, and of such a kind, as to raise an emulation in most countries of Europe to imitate them; but, if we may credit the Italian writers, the best poets of Italy, namely Petrarch and Dante, owed much of their excellence to their imitation of the Provençals; and it is farther said that the greater part of the novels of Boccace are taken from Provençal or ancient French romances.*

The Glossary of Du Cange contains a very great number of curious particulars relating to the Troubadours, Jongleurs, Cantadours, Violars, and Musars, of Provence; and it appears that in the French language all these arts were comprehended under the general denomination of *Menestraudie*, *Menestraudise*, *Jonglerie*.†

* The same may be supposed of the *Heptameron* of Margaret queen of Navarre, a work of the same kind with the *Decameron*, and containing a great number of entertaining stories. A general account of it is given by Bayle, in the article *NAVARRIE*.

† 'On peut comprendre sous le nom de *Jonglerie* tout ce qui appartient aux anciens chansonniers Provençaux, Normands, Picards, &c. Le corps de la *Jonglerie* étoit formé des *Trouvères*, ou *Troubadours*, qui

The learned Dr. Percy, in his *Essay* on the ancient English Minstrels, has given a very curious and satisfactory account of these fathers of modern poetry and popular music; and although he agrees that the several professions above enumerated were included under the general name of Minstrel, in the notes on that *Essay*, pag. xlii., he has with great accuracy assigned to each its distinct and peculiar office.

In the work of Crescimbeni above-cited the name of our own king Richard I., surnamed *Coeur de Lion*, occurs as a Provençal poet, and a composer of verses, professedly in imitation of that species of poetry which is the subject of the present enquiry. It is true that the very learned and accurate bishop Tanner, from whom we might have expected some account of this fact, has in his *Bibliotheca* omitted the mention of Richard as a writer; and it is probable that Rymer, the compiler of the *Fædera*, a man of deep research, though of all critics that ever wrote, one of the most wild and absurd, is the first of our countrymen that have in earnest asserted Richard's claim to that character. The account which he gives of it is, that Richard and his brother Geoffrey, who by the way is also ranked among the poets of that time, had formerly lived much in the courts of several princes in and about Provence, and so came to take delight in their language, their poetry, then called the *Gay Science*, and their poets, which began not long before his time to be in great vogue in the world.*

But before he proceeds to the proof of the fact, that Richard was a composer of verses, Rymer takes upon him to refute a charge of Roger Hoveden, importing nothing less than that Richard was but a vain pretender to poetry, and that whatever reputation he had acquired of that sort, he had bought with his money. The words of the historian are '*Hic ad augmentum et famam sui nominis, emendicata carmina, et rithmos adulatorios comparabat, et de regno Francorum cantores et joculariores allexerat ut de illo canerent in plateis et dicebatur ubique quod non erat talis in orbe.*' 'Richard to raise himself a name, went about begging and buying verses and flattering rhymes; and by rewards enticed over from France, singers and jesters to sing of him in the streets. And it was everywhere given out that there was not the like of him in the world again.'

Rymer observes upon this passage, first, that the assertion contained in it that the songsters and jesters were brought from France is most false; for that France had no pretensions thereabouts in those days, those countries being fiefs of the empire: more particularly he adds that Frederic the First had enfeoffed Raimond Beringer of the country of Provence, For-

'composent les chansons, et parmi lesquels il y avoit des Improvisateurs, comme on en trouve en Italie: des Chanteours ou Chanteurs, qui exécutent ou chantoient ces compositions: des Conteurs qui faisoient, en vers ou en prose contes, les recits, les histoires: des Jongleurs ou Menestrels qui accompagnoient de leurs instrumens. L'art de ces chantes, ou chansonniers, étoit nommé la Science Gale. *Gay Saber.*' Pref. *Anthologie Franç.* 1765, octavo, pag. 17.

Fauchet, to much the same purpose, has the following passage:— 'Bientôt après la division de ce grand empire François en tant de petits royaumes, duchés, et comtes, au lieu des poètes commencèrent à se faire connoître les Trouveres, et Chanteurs, Contours, et Juggleurs: qui sont Trouveres, Chantes, Conteurs, Jongleurs, ou Juggleurs, c'est à dire Menestriers chantans avec la viole.'

* Short View of Tragedy, pag. 66.

calquiers, and places adjacent, as not long after Frederic II. installed William prince of Orange, king of Arles and Viennes, which family had formerly possessed Provence.† Again he observes, that about the same time that the Provençal poetry began to flourish, the heresy of the Albingenses sprang up; and that Raimond count of Tholouse was the protector of the Albingenses, and also a great favourer of these poets; and that all the princes that were in league together to support the Albingenses against France and the pope, encouraged and patronized these poets, and amongst the rest a king of Arragon, who lost his life in the quarrel, at a battle where Simon Mountfort commanded as chief of the crusade.‡

The argument which Rymer makes use of to invalidate the testimony of the monk, is a weapon of such a form, that we know not which end to take it by: he means to say, that if Richard was a favourer of the heresy of the Albingenses, it could not but draw upon him the resentment of the clergy, and that therefore Roger Hoveden, in revenge for the encouragement which he had shewn to the enemies of the church, endeavoured to deprive him of the reputation of a poet. But as this is only negative evidence of Richard's title to a place among the Provençal poets, Rymer goes farther, and introduces from a manuscript in the possession of Signor Redi, the testimony of Guilhem Briton, an ancient bard, in these verses:—

Coblas a tièra faire adroitement,
Pou vos oillez enten dompna gentilz.

Stanzas he trimly could invent
Upon the eyes of lady gent.§

But, to remove all doubts about the fact, Rymer cites the following stanza, part of a song written by Richard himself while a prisoner in Austria:—

Or sachan ben mos homs, et mos barons
Anglez, Normans, Peytavins, et Gascons,
Qu'yeu non ay ja si paure compaignon,
Que per aver lou laïssess en preson.

Know ye, my men, my barons all,
In England and in Normandy,
In Poitiers and in Gascony,
I no companion held so small,
To let him thus in durance lie. ||

Having thus far proved his point, our author is disposed to indulge that inclination to mirth and pleasantry, which seems to have dictated those two curious works of his, the *Short View of Tragedy*, and the *Tragedies of the last Age* considered; and upon the stanza above written, as facetiously as pertinently remarks, that our king Richard had not the expedient of the French king, St. Lewis, who, taken prisoner by the Saracens, pawned the eucharist, body for body, to the infidels for his ransom.¶

He concludes his account of this matter with saying, that which hereafter will appear to be true, viz., that a manuscript with king Richard's poetry, and many other of the Provençal poets, were in the custody of Signor Redi, librarian to the great duke of Tuscany.

† Short View of Trag. pag. 68. ‡ Ibid. pag. 69. § Ibid. pag. 74.
¶ Ibid. ¶ Ibid. pag. 75.

To these evidences may be added the testimony of Crescimbeni, who in his *Commentari della Volgar Poesia*, vol. II. part I. pag. 103, says, that Richard, being struck with the sweetness of that tongue, set himself to compose a sonnet in it, which he sent to the princess Stephanetta, wife of Hugh de Baux, and daughter of Gisbert, the second count of Provence. He says afterwards, in a chapter expressly written on this king, that residing in the court of Raimond Berlinghieri, count of Provence, he fell in love with the princess Leonora, one of the prince's four daughters, whom Richard afterwards married: that he employed himself in rhyming in that language, and when he was prisoner composed certain sonnets, which he sent to Beatrix, countess of Provence, sister of Leonora, and in which he complains of his barons for letting him lie in captivity.

Crescimbeni goes on to relate that there are poems of king Richard in the library of St. Lorenzo, at Florence, 'in uno de codici Provenzali,' and others, 'nel No. 3204, della Vaticana.' The perusal of this passage excited the curiosity of a gentleman, to whom the literary world is under great obligations; Mr. Walpole procured both these repositories to be searched. In the Vatican was found a poem by Richauts de Verbeil, and another by Richauts de Terascon, but nothing that could with any degree of propriety be ascribed to Richard I., king of England. In the Laurentine library were found the verses above spoken of, which as a very singular and valuable curiosity, Mr. Walpole has given to the world in the first volume of his *Catalogue of royal and noble Authors*; they are as follow:—

REIS RIZARD.

Ja nus hom pris non dira sa raison
Adreitament se com hom dolent non
Mas per conort pot il faire chanson
Pro adamis, mas povre son li don
Onta j avron, se por ma reezon
Soi fai dos yver pris.

Or Sanchon ben mi hom e mi baron
Engles, Norman, Pettavin et Gascon,
Qe ge navoie si povre compaignon
Qeu laissasse por aver en preison
Ge nol di pas, por nulla retraison
Mas anquar soige pris.

Jan sai eu de ver certainement
Com mort ne pris na amie ne parent
Quant il me laissent por or ni por argent
Mal mes de mi, ma perz mes por ma gent
Qapres na mort n auron reperzhament
Tan longament soi pris.

Nom merveille seu ai le cor dolent
Qe messen her met ma terra en torment
No li menbra del nostre segrement
Qe nos feimes an dos communement
Bem sai de ver qe gaire longament
Non serai eu sa pris.

Mi compaignon cui j amoi e cui j am
Cil de chaill e cil de persarain
De lor chanzon qil non sont pas certain
Unca vers els non oi cor fals ni vain
Sil me guertoient il feron qe vilain
Tan com ge soie pris.

Or sachent ben Enjevin e Torain
E il bachaliers qi son legier e sain
Qen gombre soie pris en autrui main
Il ma juvassen mas il no ve un grain
De belles armes sont cra voit li plain
Per zo qe ge soi pris.

Contessa soit votre prez sobrain
Sal deus e garde cel per cui me clam
Et per cui ge soi pris :
Ge nol di pas por cela de certrain
La mere loys.

CHAP XLII.

BESIDES that Richard was endued with the poetical faculty, it is recorded of him that he was skilled in music. In the *Theatre of Honour and Knighthood*, translated from the French of Mons. Favine, and printed at London in 1623, tom. II. pag. 48, is a curious relation of Richard's deliverance from captivity by the assistance of Blondel de Nesle, a rhymer or minstrel, whom he had trained up in his court, and who by singing a song known to them both, discovered his master imprisoned in a castle belonging to the duke of Austria. This story is taken from the *Recueil de l'Origine de la Langue et Poesie Francoise*, Ryme, et Romans, &c. of president Fauchet, Paris 1581: but Favine,* from Matthew Paris, and other historiographers, and from an ancient manuscript of old poesies, has given as well a relation of the causes and manner of his captivity, as of his deliverance from it. The whole is curious and entertaining, and is here given in the words of the old English translator:—

'Richard saved himself by a more prosperous wind, with one named Guillaume de l'Etang, and a boy that understood the Germaine tongue, travailing three dayes and nights without receiving any sustenance, or tarrying in any place. But hunger pressing them extreamely, they came to lodge in a towne being neere to the river of Danubie, named Gynatia in Austria, as saith Mathew Paris, but according to the histories of Germanie, which I have red, it is called Erdbourg, where then remained Leopold, duke of Austria,† to welcome Richard thither, like him falne out of a fever into a farre worse disease. Being come to his inne, he sent his boy to make provision for him in the market, where the boy shewing his purse to be full

* This book of Favine abounds with a great variety of curious particulars relative to chivalry and manners in general. Ashmole appears to have derived great assistance from it in the compiling his *History of the Order of the Garter*.

† The causes of Leopold's enmity to Richard are variously related, but the author now citing assigns the following as the first occasion of their quarrel:—

'Richard, at his return endured ten thousand afflictions, whereof briefly behold the subject. In the yeare one thousand one hundred fourescore and twelve, Leopold duke of Austria came into the Holy Land, to beare armes there as other Christian princes did. At his arrival the marshall of his campe, having marked out a lodging for the duke his maister, planted downe his tent and his ensigne on it. A Norman, being a follower of king Richard, maintained that the lodging place belonged to him. From words they fell to blowes, and Richard, without understanding the reasons of the parties, caused the duke of Austria's tent and ensigne to be pull'd downe and hurl'd upon a heape into a ditch of mire. The duke made complaint to Richard, to have reparation of this offence, but he payed him with derision; whereupon, the duke seeing he was despised, desired God to doe reason for him, and then he would remit the injurie.'

'of bezans,* and buying very exquisite victuals; he 'was stayed by the inhabitants of the towne to 'understand further of his condition. Having cer- 'tified them that he belonged to a wealthe merchant, 'who would arrive there within three dayes; they 'permitted him to depart. Richard being heerof 'advertised, and much distasted in his health by so 'many hard sufferances on the seas, and perillous 'passages on the waves, concluded to repose there 'some few dayes in the towne, during which time 'the boy alwayes made their provision of food. 'But by ill accident, on the day of St. Thomas the 'Apostle, the boy being in the market, chaunced ' (through neglect) to have king Richard's gloves 'tuckt under his girdle: the magistrate of the towne 'observing it, tooke the boy and gave him torment 'to make him confesse whose gloves they were. 'The power of punishment, and threates to have 'his tongue cut out of his head, compelled him to 'tell the trueth. So in short while after, the duke 'of Austria hearing the tydings, engirt the inne 'where Richard was with a band of armed men, and 'Richard, with his sword in his hand yielded him- 'selfe to the duke, which kept him strongly environed 'with well-armed souldiours, who watched him night 'and day, with their swords readie drawne. This 'is the affirmation of Mathew Paris, concerning the 'surprizall of king Richard.

'But I have read an ancient manuscript of old 'poesies, written about those very times, which re- 'porteth this historie otherwise; saying that Richard 'being in his inne, disguised himselfe like a servant 'cooke, larding his meate, broching it, and then 'turning it at the fire himselfe: in which time, one 'of the duke of Austrias followers, being then in 'the inne, came accidentally into the kitchin, who 'tooke knowledge of this royall cooke; not by his 'face, which he purposely disfigured with the soyling 'of the kitchin; but by a ring of gold, which very 'unadvisedly he wore on his finger. This man ran 'immediately and advertised the duke his maister 'that the king of England was within the compasse 'of his power, and upon this advertisement Richard 'was arrested.

'In the yeare following, namely, one thousand 'one hundred fourescore and thirteene, the duke 'sold king Richard to the emperor Henry, for the 'sum of threescore thousand pounds of silver, the 'pounds answering the weight and order observed at 'Cologne; with which sum Leopold towred the 'wals of the citie of Vienna in Austria, and bought 'the duchie of Styria, Neopurg, and the counties of 'Lins and Wels, of the Bishops of Passau and of 'Wirtspourg. So speaketh the Latin chronicle of 'Otho of Austria, bishop of Frisinghen, for these

* Bezans, bezants, or besans, are pieces of gold coin. Guillim thus explains the term:—'A beisaunte, or as some call them, a talent, is 'taken for a massive plate or bullion of gold, containing, according to 'Lelgh, of troy weight 104 lb. and two ounces, and is in value 3750 lb. 'sterling, and had for the most part no similitude or representation upon 'it, as some hold, but only fashioned round and smooth, as if it were 'fitted and prepared to receive some kind of stamps. But others are of 'opinion that they were stamped, and that they were called bezants, or 'rather bizants, of Bizantium, the place where they were anciently 'coined.' Display of Heraldry, Lond. 1632, pag. 38. From the exceeding 'magnitude of this coin it is certain that Famine means only to say in 'general that the boy's purse was well stored with money.

'particularities were forgotten by Mathew Paris, 'who further saith, That in the same yeere of 'fourescore and thirteene, the third holy day after 'Palme-Sunday, Leopold led Richard prisoner to 'the emperor, who sent him under sure guard to the 'Tribales. "Retrudi eum præcepit in Triballis, 'à quo carcere nullus ante dies istos exiuit, qui 'ibidem intrauit: de quo Aristoteles libro quinto. "Bonum est mactare patrem in Triballis; Et alibi."

"Sunt loca, sunt gentes, quibus est mactare parentes."

'The Englishmen were more than a whole yeare, 'without hearing any tydings of their king, or in 'what place he was kept prisoner. He had trained 'up in his court a rimer or minstrell called Blondell 'de Neale, who (so saith the manuscript of old 'poesies, and an auncient manuscript French chron- 'icle) being so long without the sight of his lord, 'his life seemed wearisome to him, and he became 'much confounded with melancholy. Knowne it 'was, that he came backe from the Holy Land, 'but none could tell in what countrey he arrived. 'Whereupon this Blondel resolving to make search 'for him in many countries, but he would heare 'some newes of him; after expence of divers dayes 'in travaile, he came to a towne (by good hap) neere 'to the castell where his maister king Richard was 'kept. Of his host he demanded to whom the 'castell appertained, and the host told him it be- 'longed to the duke of Austria. Then he enquired 'whether any prisoners were therein detained or no; 'for alwayes he made such secret questionings where- 'soever he came, and the hoste gave answer that 'there was one onely prisoner, but he knew not 'what he was, and yet he had bin detained there 'more than the space of a yeare. When Blondel 'heard this, he wrought such meanes, that he became 'acquainted with them of the castell, as minstrells 'doe easily win acquaintance any where; but see 'the king he could not, neither understand that it 'was he. One day he sat directly before a window 'of the castell where king Richard was kept prisoner, 'and began to sing a song in French, which king 'Richard and Blondel had sometime composed to- 'gether. [When king Richard heard the song, he 'knew it was Blondel that sung it; and when Blondel 'paused at halfe of the song, the king entreated him 'to sing the rest.†] Thus Blondel won knowledge 'of the king his maister; and returning home into 'England, made the barons of the countrey acquainted 'where the king was.'

Fauchet, in his relation of this extraordinary event, says that he had met with a narrative of it in a French Chronicle written in the time of Philip the August, about the year 1200.

It is generally said that the ransom of Richard was one hundred thousand marks, but Matthew Paris asserts that it was a hundred and forty thousand marks of silver, Cologne weight, a sum so very great,

† Dr. Percy has given the passage from Fauchet in his own words, which are these:—"Et quant Blondelle ot dite la moitie de la Chanson, 'le roi Richart se prist à dire l'autre moitie et l'acheva:" and renders the last clause of the sentence thus:—"BEGAN THE OTHER HALF AND 'COMPLETED IT." Essay on English Minstrels, pag. xxx.

that to raise it, the English were obliged to sell their church plate, even to the very chalices.*

The foregoing account contains incontestible evidence that Richard was of the class of poets, for the reasons above given termed Provençal, and of these the minstrels appear to be the genuine offspring. The nature of their profession is learnedly treated on by Dr. Percy in his *Essay on the ancient Minstrels*, prefixed to the *Reliques of English Poetry*. The most generally received opinion of them is that they were players on musical instruments, and those chiefly of the stringed kind, such as the harp, the cittern, and others; but the word Minstrel, in the larger acceptance of it, signifies a musician in general. Dr. Cowel in his *Law Dictionary* thus explains it; 'a musician, a fidler, a piper;' and in the old poem of Lydgate, entitled the *Daunce of Machabree or of Death*, in the Appendix to Sir William Dugdale's *History of St. Paul's Cathedral*, pag. 265, col. i. he is said to be a minstrel, who can both note, i. e. sing, and pipe.

Dr. Percy has asserted, with great appearance of truth, that the employment of the Anglo-Saxon bards was to sing to the harp the praises of their patrons, and other distinguished persons. Nay, it is farther clear from a passage in the *Ecclesiastical History of Bede*, relating to the poet *Cædmon*, cited by him in the notes on the *Essay on the ancient English Minstrels*, pag. 50, that to sing to the Harp at festivals even by the guests themselves, was so customary, that such as were incapable of doing it were frequently necessitated to retire.† And that

* Robert of Gloucester thus speaks of the means used to raise this sum:—

The hundred thousand marc were paid bioure hond
And wel narwe igadered in Engeland,
Nor broches, and ringes simmes also,
And the calis of the weud me soolde ther to
And grey monckes that new come, and pouere tho were
Zeue al her welle there to of one zere.

CHRON. 489.

The distress which this occasioned gave rise to a scholastic question, namely, what substance, silver and gold being wanting, was proper to contain the wine in the eucharist: and we find in *Lyndwood*, lib. i. de Summe Trinitate et Fide Catholica, cap. II. pag. 8, § docent. verb. In Calice, that it was thereupon concluded to make use of chalices of latten. The objections against vessels formed of other substances savour of the divinity of those times; glass was too brittle, wood was spongy, alchymy, aurichalcum, a factitious metal, vulgarly ochamy, as when we say an ochamy spoon, was subject to rusting, and copper had a tendency to provoke vomiting. Fuller, who in this instance is more merry than wise, laughs at this decision, and calls it deep divinity. The question was of importance, and respected no less than a sacred rite and the health of the people.

This usage continued till about the year 1443, when, to take the words of Fuller, for there is no provincial constitution to that purpose extant, 'the land being more replenished with silver, John Stafford archbishop of Canterbury enknotted that priest in the greater excommunication 'who should consecrate poculum stanneum.' Vide Fuller's *History of the Holy War*, book III. chap. xiii.

† The passage cited by Dr. Percy from Bede, and more especially the Anglo-Saxon version thereof by king Alfred, are abundant evidence of the facts which they are cited to prove. As it does not appear from either of the quotations who the poet *Cædmon* was, nor what are the particulars of the story in which he is mentioned, the same are here given at large in the language of a modern translator of Bede's *History*, a person, as is conjectured, of the Romish communion. 'In the monastery of the abbess Hilda, [situated in a place called Streaneshalh 'supposed to be somewhere in the north of England] there resided a brother, particularly remarkable for the grace of God, who was wont to make pious and religious verses, so that whatsoever was interpreted to him out of holy writ, he soon after put the same into poetical expressions of much sweetness and compunction, in his own, that is, the English language. By his verses the minds of many were often excited to despise the world and to aspire to the heavenly life. Others after him attempted in the English nation to compose religious poems, but none could ever compare with him; for he did not learn the art of poetizing of men, but through the divine assistance; for which reason

the employment of the ancient Minstrels also was to sing panegyric songs and verses on their benefactors, is farther clear from the explanation of the word Minstrel in that learned work the *Law Dictionary* of Dr. Cowel, who concludes the article with saying, it was usual with these minstrels, not only to divert princes and the nobility with sports, but also with musical instruments, and with flattering songs in the praise of them and their ancestors, which may be seen in these verses:—

Principis a facie, cytharæ celeberrimus arte
Assurgit mimus, ars musica quem decoravit
Hic ergo chorda resonante subintulit ista :
Inclite rex regum, probitatis stemmate vernans,
Quem vigor et virtus extollit in æthera famæ,
Indole virtutis qui vinces facta parentis.
Major ut Atrides, patrem Neptunius Heros
Ægea, Pelides excedit Pelea, Jason
Esona, nec prolem pudor est evincere patrem ;
Corde gigas, agnus facie Laertius astu,
Consilio Nestor, &c.

The history of this country affords a remarkable instance of favour shewn to this vagabond profession of a minstrel. The privileges which they are possessed of are of such a kind, as to entitle them to the countenance of the legislature, and, what must appear very remarkable, to the protection of the law; for although minstrels, in common with fencers, bearwards, and common players of interludes, are in the law deemed rogues and vagabonds, there is a special provision in all the statutes that declare them to be so, in favour of common fiddlers and Minstrels, through-

'he never could compose any trivial or vain poem, but only these that relate to religion, and suited his religious tongue; for having lived in a secular habit till well advanced in years, he had never learnt any thing of versifying; for which reason being sometimes at entertainments, when it was agreed for the more mirth, that all present should sing in their turns; when he saw the instrument come towards him, he rose up from table and returned home. Having done so at a certain time, and going out of the house where the entertainment was, to the stable, the care of horses falling to him that night, and composing himself there to rest at the proper time, a person appeared to him in his sleep, and saluted him by his name, said, "Cædmon, sing some song to me;" he answered, "I cannot sing; for that was the reason why I left the entertainment and retired to this place, because I could not sing." The other who talked to him, replied, "However you shall sing." "What shall I sing?" rejoined he, "Sing the beginning of creatures," said the other. Hereupon he presently began to sing verses to the praise of God, which he had never heard, the purport whereof was thus:—"We are now to praise the Maker of the heavenly kingdom, the power of the Creator and his council, the deeds of the Father of glory: how he, being the eternal God, became the author of all miracles, who first, as almighty preserver of the human race, created heaven for the sons of men as the roof the house, and next the earth." This is the sense, but not the words in order as he sung them in his sleep: for verses, though never so well composed, cannot be literally translated out of one language into another without losing much of their beauty and loftiness. Awakening from his sleep, he remembered all that he had sung in his dream, and soon added much more to the same effect in divine verses. Coming in the morning to the steward that he was under, he acquainted him with the gift he had received; and being conducted to the abbess, he was ordered, in the presence of many learned men, to tell his dream and repeat the verses, that they might give all their judgment what it was, and whence it proceeded that he said: They all concluded that an heavenly grace had been conferred on him by our Lord. They expounded to him a passage in holy writ, either historical or doctrinal, ordering him, if he could, to put the same into verse. Having undertaken it, he went away, and returning the next morning, gave it to them composed into most excellent verse; whereupon the abbess, embracing the grace of God in the man, instructed him to quit the secular habit, and take upon him the monastical life; which being accordingly done, she associated him to the rest of the brethren in the monastery, and ordered that he should be taught the whole series of the sacred history.' Bede, *Hist. Eccl.* lib. IV. cap. xxi.

A poetical paraphrase of the book of Genesis and certain scripture stories was published by Francis Junius at Amsterdam, in 1655, in quarto, from a manuscript of archbishop Usher. This *Cædmon* is supposed by Tanner, and many other writers, to be the *Cædmon* mentioned by Bede; but Dr. Hickeys seems to entertain some doubt of it.

out the county of Chester, of which the following is the history :—

In the statute of 17 Geo. II. cap. 5, is the following proviso :—“ Provided always that this act, or any thing therein contained, or any authority thereby given, shall not in anywise extend to disinherit, prejudice, or hinder the heirs or assigns of John Dutton, of Dutton, late of the county of Chester, esquire, for, touching, or concerning the liberty, privilege, pre-eminence or authority, jurisdiction or inheritance, which they, their heirs or assigns now lawfully use, or have, or lawfully may or ought to use within the county palatine of Chester, and county of Chester, or either of them, by reason of any ancient charters of any kings of this land, or by reason of any prescription or lawful usage or title whatsoever.”

This right which the parliament of Great Britain has shown itself so tender of infringing, is founded on an event, of which the following relation is to be met with in the Historical Antiquities of Cheshire, collected by Sir Peter Leycester, Bart., part II. chap. vi. and is mentioned in a book intitled Ancient Tenures of Land made public, by Thomas Blount, Esq. octavo, 1679, pag. 156, et seq.

In the time of king John, Randle the third, surnamed Blundevil, earl of Chester, having many conflicts with the Welsh, was at last distressed by them, and forced to retreat to the castle of Rothelent in Flintshire, where they besieged him, who presently sent to his constable of Chester, Roger Lacy, surnamed Hell, for his fierce spirit, that he would come with all speed, and bring what forces he could for his relief. Roger having gathered a tumultuous rout of Fiddlers, Players, Cobblers, and debauched persons, both men and women, out of the city of Chester (for it was then the fair there) marched immediately with them towards the earl.* The Welsh perceiving a great multitude coming, raised the siege and fled. The earl coming back with his constable to Chester, gave him power over all the Fiddlers and Shoemakers of Chester, in reward and memory of his service. The constable retained to himself and his heirs the authority and donation of the Shoemakers, but John his son conferred the authority over the profligates of both sexes on his steward, which then was Dutton of Dutton, by this his deed.

“*Sciant presentes et futuri, quod ego Johannes, Constabularius Cestrie, dedi et concessi, et hac presentia carta mea confirmavi Hugoni de Dutton, et hæredibus suis, magistratum omnium leccatorum et meretricum totius Cestershirie, sicut liberius illum magistratum teneo de comite; salvo jure meo mihi et hæredibus meis. Hiis testibus,*” &c.

Blount goes on to observe, that though this original grant makes no mention of giving rule over Fiddlers and Minstrels, yet that an ancient custom has now reduced it only to the minstrelsy; for probably the rout, which the constable brought to the rescue of the

earl, were debauched persons, drinking with their sweethearts in the fair, the fiddlers that attended them, and such loose persons as he could get.

He proceeds to relate, that Anno 14 Hen. VII. a Quo Warranto was brought against Laurence Dutton, of Dutton, esq. to shew why he claimed all the minstrels of Cheshire and the city of Chester, to appear before him at Chester yearly, on the feast of St. John Baptist, and to give him at the said feast, ‘*Quatuor legenas vini et unam lanceam,*’ i. e. four flaggons of wine and a lance; and also every minstrel then to pay him four pence half-penny; and why he claimed from every harlot in Cheshire, and the city of Chester ‘(officium suum exercente)’ four pence yearly at the said feast, &c. whereunto he pleaded prescription.

And farther, that ‘the heirs of this Hugh de Dutton enjoy the same power and authority over the minstrelsy of Cheshire, even to this day, and keep a court every year upon the feast of St. John Baptist, at Chester, being the fair day, where all the Minstrels of the county and city do attend and play before the lord of Dutton upon their several instruments; he or his deputy then riding through the city thus attended, to the Church of St. John, many gentlemen of the county accompanying him, and one walking before him in a “surcoat of his arms depicted upon taffata;” and after divine service ended, hold his court in the city; where he or his steward renews the old licences granted to the Minstrels, and gives such new ones as he thinks fit, under the hand and seal of himself or his steward, none presuming to exercise that faculty there without it. But now this dominion or privilege is by a daughter and heir of Thomas Dutton, devolved to the lord of Gerrard, of Gerrard’s Bromley in Staffordshire.’

He adds, that whereas by the statute of 39 Eliz. Fiddlers are declared to be Rogues; yet by a special proviso therein, those in Cheshire, licensed by Dutton of Dutton, are exempted from that infamous title, in respect of this his ancient custom and privilege.

Another writer† derives this privilege from a higher source, for among many instances of favour shown to the abbey of St. Werburg in Chester, by Leofric earl of Chester, in the time of Edward the Confessor, he mentions the grant of a fair on the festival of that saint, to be holden for three days; to whose honour he likewise granted, that whatsoever Thief or Malefactor came to the solemnity, should not be attached while he continued in the same fair, except he committed any new offence there.

Which special privilege, says the same writer, ‘as in tract of time it drew an extraordinary confluence of loose people thither at that season, so happened it to be of singular advantage to one of the succeeding earles. For being at Rodelent castle in Wales, and there besieged by a power of the Welsh, at such a time he was relieved rather by their number than strength, under the conduct of Robert de Lacy, constable of Chester, who with pipers and other sorts of Minstrels drew them forth, and marching towards the castle, put the Welsh to such terror that

† Daniel King in his *Vale Royal of England illustrated*, part II. pag. 29.

* It seems that this earl had rendered himself famous by his prowess, and that his exploits were celebrated in rhymes and songs down to the time of Richard II. for in the *Visions of Pierce Plowman*, *Passus quintus*, Sloth says of himself:—

I cannot perfitly my Pater-noster as the prift it fingeth,
But I con rimes of Robenhod and Randal of Chefter.

'they presently fled. In memory of which notable exploit, that famous meeting of such Minstrels hath been duly continued to every Midsummer fair, at which time the heir of Hugh de Dutton, accompanied with diverse gentlemen, having a pennon of his arms borne before him by one of the principal Minstrels, who also weareth his surcoat, first rideth up to the east gate of the city, and there causing proclamation to be made that all the Musicians and Minstrels within the county-palatine of Chester do approach and play before him. Presently so attended he rideth to St. John's church, and having heard solemn service, proceedeth to the place for keeping of his court, where the steward having called every Minstrel, impanelleth a jury, and giveth his charge. First, to enquire of any treason against the king or prince (as earl of Chester); secondly, whether any man of that profession hath "exercised his instrument" without licence from the lord of that court, or what misdemeanour he is guilty of. And thirdly, whether they have heard any language amongst their fellows, tending to the dishonour of their lord and patron (the heir of Dutton) which privilege was anciently so granted by John de Lacy, constable of Chester, son and heir to the before specified Roger, unto Hugh de Dutton and his heirs, by a special charter in these words, viz., "*Magisterium omnia leccatorum et meretricum totius Cestriashire,*" and hath been thus exercised time out of mind.'

Another instance of favour to Minstrels, and of privileges enjoyed by them, occurs in Dr. Plot's History of Staffordshire, chap. X. § 69, where the author taking occasion to mention Tutbury-castle, a seat of the ancient earls and dukes of Lancaster, is led to speak of Minstrels appertaining to the honour of Tutbury, and of their king, with his several officers; of whom, and of the savage sport commonly known by the name of the Tutbury Bull-running, he gives the following accurate account:—

'During the time of which ancient earls and dukes of Lancaster, who were ever of the blood royal, great men in their times, had their abode, and kept a liberal hospitality here, at their honour of Tutbury, there could not but be a general concourse of people from all parts hither, for whose diversion all sorts of musicians were permitted likewise to come to pay their services; amongst whom (being numerous) some quarrels and disorders now and then arising, it was found necessary after a while they should be brought under rules; diverse laws being made for the better regulating of them, and a governor appointed them by the name of a king, who had several officers under him, to see to the execution of those laws; full power being granted to them to apprehend and arrest any such Minstrels appertaining to the said honour, as should refuse to do their services in due manner, and to constrain them to do them; as appears by the charter granted to the said king of the Minstrels by John of Gaunt, king of Castile and Leon, and duke of Lancaster, bearing date the 22nd of August in the 4 year of the reign of king Richard the second, entituled *Carta le Roy de Ministrals*, which being written in old

'French, I have here translated, and annexed it to this discourse, for the more universal notoriety of the thing, and for satisfaction how the power of the king of the Minstrels and his officers is founded; which take as follows:—

"John, by the grace of God, king of Castile and Leon, duke of Lancaster, to all them who shall see or hear these our letters, greeting. Know ye, we have ordained, constituted, and assigned to our well-beloved the King of the Minstrels in our honor of Tutbury, who is, or for the time shall be, to apprehend and arrest all the Minstrels in our said honor and franchise, that refuse to do the service and Minstreley as appertain to them to do from ancient times at Tutbury aforesaid, yearly on the day of the Assumption of our Lady; giving and granting to the said King of the Minstrels for the time being, full power and commandement to make them reasonably to justify and to constrain them to do their services and Minstrelsies in manner as belongeth to them, and as it hath been there, and of ancient times accustomed. In witness of which thing we have caused these our letters to be made patents. Given under our privy seal, at our castle of Tutbury, the 22nd day of Aug. in the fourth year of the reign of the most sweet king Richard the second."

'Upon this, in process of time, the defaulters being many, and the amercements by the officers perhaps not sometimes over reasonable, concerning which, and other matters, controversies frequently arising, it was at last found necessary that a court should be erected to hear complaints, and determine controversies between party and party, before the steward of the honor; which is held there to this day on the morrow after the Assumption, being the 16th of August, on which day they now also do all the services mentioned in the abovesaid grant; and have the bull due to them anciently from the prior of Tutbury, now from the earls of Devon, whereas they had it formerly on the Assumption of our Lady, as appears by an *Inspeimus* of king Henry the sixth, relating to the customs of Tutbury, where, amongst others, this of the bull is mentioned in these words: "*Item est ibidem quædam consuetudo quod histriones venientes ad matutinas in festo Assumptionis beatæ Mariæ, habebunt unum taurum de priore de Tutbury, si ipsum capere possunt citra aquam Dove propinquiorem Tutbury; vel prior dabit eis xld. pro qua quidem consuetudine dabuntur domino ad dictum festum annuatim xxd.*" i. e. that there is a certain custom belonging to the honor of Tutbury, that the minstrells who came to matins there on the feast of the Assumption of the blessed Virgin, shall have a bull given them by the prior of Tutbury, if they can take him on this side the river Dove, which is next Tutbury; or else the prior shall give them xld. for the enjoyment of which custom they shall give to the lord at the said feast yearly, xxd.

'Thus I say the services of the Minstrels were performed and bull enjoyed anciently on the feast

'of the Assumption; but now they are done and
'had in the manner following: on the court day,
'or morrow of the Assumption, being the 16th of
'August, what time all the Minstrells within the
'honor come first to the bailiff's house of the manor
'of Tutbury, who is now the earl of Devonshire,
'where the steward for the court to be holden
'for the king, as duke of Lancaster (who is now the
'duke of Ormond) or his deputy, meeting them,
'they all go from thence to the pariah church of
'Tutbury, two and two together, music playing
'before them, the King of the Minstrells for the year
'past, walking between the steward and bailiff, or
'their deputies; the four stewards or under officers
'of the said King of the Minstrells, each with
'a white wand in their hands, immediately following
'them, and then the rest of the company in order.
'Being come to the church, the vicar reads them
'divine service, chusing psalms and lessons suitable
'to the occasion: the psalms when I was there, an.
'1680, being the 98. 149. 150: the first lesson 2
'Chron. 5; and the second the 5 chap. of the Epistle
'to the Ephesians, to the 22 verse. For which
'service every Minstrell offered one penny, as a due
'always paid to the vicar of the church of Tutbury
'upon this solemnity.

'Service being ended, they proceed in like manner
'as before, from the church to the castle-hall or
'court, where the steward or his deputy taketh his
'place, assisted by the bailiff or his deputy, the King
'of the Minstrells sitting between them, who is to
'oversee that every Minstrell dwelling within the
'honor and making default, shall be presented and
'amerced: which that he may the better do, an
'O Yes is then made by one of the officers, being
'a Minstrell, 3 times, giving notice, by direction
'from the steward, to all manner of Minstrells dwell-
'ing within the honor of Tutbury, viz., within the
'counties of Stafford, Darby, Nottingham, Leicester,
'and Warwick, owing suit and service to his ma-
'jesty's Court of Musick, here holden as this day,
'that every man draw near and give his attendance,
'upon pain and peril that may otherwise ensue; and
'that if any man will be assigned* of suit or plea,
'he or they should come in, and they should be
'heard. Then all the musicians being called over
'by a court-roll, two juries are impanelled, out of
'24 of the sufficientest of them, 12 for Staffordshire,
'and twelve for the other counties; whose names
'being delivered in court to the steward, and called
'over, and appearing to be full juries, the foreman
'of each is first sworn, and then the residue, as is
'usual in other courts, upon the holy evangelists.

'Then, to move them the better to mind their
'duties to the king, and their own good, the steward
'proceeds to give them their charge; first commend-
'ing to their consideration the Original of all Musick,
'both Wind and String Musick; the antiquity and
'excellency of both; setting forth the force of it upon
'the affections by diverse examples; how the use of
'it has always been allowed, as is plain from holy

'writ, in praising and glorifying God; and the skill
'in it always esteemed so considerable, that it is still
'accounted in the schools one of the liberal arts, and
'allowed in all godly christian commonwealths;
'where by the way he commonly takes notice of the
'statute, which reckons some musicians amongst
'vagabonds and rogues; giving them to understand
'that such societies as theirs, thus legally founded
'and governed by laws, are by no means intended by
'that statute, for which reason the Minstrells belong-
'ing to the manor of Dutton, in the county palatine
'of Chester, are expressly excepted in that act. Ex-
'horting them upon this account to preserve their
'reputation; to be very careful to make choice of
'such men to be officers amongst them as fear God,
'are of good life and conversation, and have know-
'ledge and skill in the practice of their art. Which
'charge being ended, the jurors proceed to the elec-
'tion of the said officers, the king being to be chosen
'out of the four stewards of the preceding year, and
'one year out of Staffordshire, and the other out of
'Darbyshire, interchangeably; and the four stewards,
'two of them out of Staffordshire, and two out of
'Darbyshire, three being chosen by the jurors, and
'the fourth by him that keeps the court, and the
'deputy steward or clerk.

'The jurors departing the court for this purpose,
'leave the steward with his assistants still in their
'places, who in the mean time make themselves merry
'with a banquet, and a Noise† of musicians playing
'to them, the old king still sitting between the
'steward and bailiff as before; but returning again
'after a competent time, they present first their
'chiefest officer by the name of their King; then the
'old king arising from his place, delivereth him a
'little white wand in token of his sovereignty, and
'then taking up a cup filled with wine, drinketh to
'him, wishing him all joy and prosperity in his office.
'In the like manner do the old stewards to the new,
'and then the old king riseth, and the new taketh his
'place, and so do the new stewards of the old, who
'have full power and authority, by virtue of the
'king's steward's warrant, directed from the said
'court, to levy and distrain in any city, town cor-
'porate, or in any place within the king's dominions,
'all such fines and amercements as are inflicted by
'the said juries that day upon any Minstrells, for his
'or their offences, committed in the breach of any of
'their ancient orders, made for the good rule and
'government of the said society. For which said
'fines and amercements so distrained, or otherwise
'peaceably collected, the said stewards are account-
'able at every audit; one moiety of them going to
'the king's majesty, and the other the said stewards
'have for their own use.

'The election, &c. being thus concluded, the court
'riseth, and all persons then repair to another fair
'room within the castle, where a plentiful dinner is
'prepared for them, which being ended, the Minstrells

* This word should be oscolded, for so it is in Blount, and is nonsense otherwise. In this place it means respited.

† It seems that a company of musicians is termed a Noise; this we learn from a passage in the Second Part of Henry IV., Act II., Sc. IV., where mention is made of Sneak's Noise, i. e. a company of Musicians of which one named Sneak was the Master; it may be inferred that a Noise of Musicians is not a sarcastic, but a technical term.

'went anciently to the abbey-gate, now to a little barn by the town side, in expectance of the bull to be turned forth to them, which was formerly done, according to the custom above-mentioned, by the prior of Tutbury, now by the earl of Devonshire; which bull, as soon as his horns are cut off, his Ears cropt, his Taile cut by the stumple, all his Body smeared over with Soap, and his nose blown full of beaten pepper; in short, being made as mad as 'tis possible for him to be, after solemn Proclamation made by the Steward, that all manner of persons give way to the Bull, none being to come near him by 40 foot, any way to hinder the Minstrells, but to attend his or their own safeties, every one at his own peril: he is then forthwith turned out to them (anciently by the prior), now by the lord Devonshire, or his deputy, to be taken by them and none other, within the county of Stafford, between the time of his being turned out to them, and the setting of the sun of the same day; which if they cannot do, but the Bull escapes from them untaken, and gets over the river into Darbyshire, he remains still my lord Devonshire's bull: but if the said Minstrells can take him, and hold him so long as to cut off but some small matter of his Hair, and bring the same to the Mercat Cross, in token they have taken him, the said Bull is then brought to the Bailiff's house in Tutbury, and there collered and roap'd, and so brought to the Bull-Ring in the High-street, and there baited with doggs: the first course being allotted for the King; the second for the Honour of the Towne; and the third for the King of the Minstrells, which after it is done the said Minstrells are to have him for their owne, and may sell, or kill, and divide him amongst them, according as they shall think good.

'And thus this Rustic Sport, which they call the Bull-running, should be annually performed by the Minstrells only, but now-a-days they are assisted by the promiscuous multitude, that flock hither in great numbers, and are much pleased with it; though sometimes through the emulation in point of Manhood, that has been long cherished between the Staffordshire and Darbyshire men, perhaps as much mischief may have been done in the trial between them, as in the Jeu de Taureau, or Bull-fighting, practised at Valentia, Madrid, and many other places in Spain, whence perhaps this our custom of Bull-running might be derived, and set up here by John of Gaunt, who was king of Castile and Leon, and lord of the Honor of Tutbury; for why might not we receive this sport from the Spanyards as well as they from the Romans, and the Romans from the Greeks? wherein I am the more confirmed, for that the *Ταυροκαρα ψίλων ημέραι* amongst the Thessalians, who first instituted this Game, and of whom Julius Cæsar learned it, and brought it to Rome, were celebrated much about the same time of the year our Bull-running is, viz., Pridie Idæ Augusti, on the 12th of August; which perhaps John of Gaunt, in honour of the Assumption of our Lady, being but three days after, might remove to the 15th, as after ages did (that all the solemnity and court might be

'kept on the same day, to avoid further trouble) to the 16th of August.'

The foregoing account of the modern usage in the exercise of this barbarous sport, is founded on the observation of the relater, Dr. Plot, whose curiosity it seems led him to be present at it in the year 1680: how it was anciently performed appears by an extract from the Coucher-book of the honour of Tutbury, which is given at large in Blount's Collection of ancient Tenures before cited.*

CHAP. XLIII.

SUCH were the exercises and privileges of the minstrels in this country; and it will be found that the Provençal troubadours, jongleurs, musars, and violars, from whom they clearly appear to have sprung, possessed at least an equal share of favour and protection under the princes and other great personages who professed to patronize them. The Provençals are to be considered as the fathers of modern poesy and music, and to deduce in a regular order the history of each, especially the latter, it is necessary to advert to those very circumstantial accounts that are extant of them, and the nature of their profession in the several authors who speak of them. It should seem that among them there were many men of great eminence; the first that occurs in the history of them given by Crescimbeni is Giuffredo Rudello, concerning whom it is related that he was very intimate with Geoffrey, the brother of Richard the First; and that while he was with him, hearing from certain pilgrims, who were returned from the Holy Land, of a countess of Tripoli, a lady much celebrated, but the story says not for what, he determined to make her a visit; in order to which he put on the habit of a pilgrim, and began his voyage. In his way to Tripoli he became sick, and before he could land was almost dead. The countess being informed of his arrival, went on board the ship that brought him, just time enough to see him alive: she took him by the hand, and strove to comfort him. The poet was but just sensible; he opened his eyes, said that having seen her he was satisfied, and died. The countess, as a testimony of her gratitude for this visit, which probably cost poor Geoffrey his life, erected for him a splendid tomb of porphyry, and inscribed on it his epitaph in Arabic verse: besides this she caused his poems to be collected, and curiously copied and illuminated with letters of gold.† She was soon afterwards seized with a deep melancholy, and became a nun.

* In the collection of ancient ballads, known by the name of Robin Hood's Garland, is a very apt allusion to the Tutbury feast or bull-running, in the following passage:—

'This battle was fought near Tutbury town
'When the bag-pipers baited the bull.
'I am king of the fiddlers, and swear 'tis a truth,
'And call him that doubts it a gull:
'For I saw them fighting, and fiddl'd the while,
'And Clorinda sung Hey derry down:
'The bumpkins are beaten, put up thy sword Bob,
'And now let's dance into the town.
'Before we came to it we heard a great shouting,
'And all that were in it look'd madly:
'For some were a bull-back, some dancing a morrice,
'And some singing Arthur a Bradley.'

SOME I.

† Comment. della Volgar Poesia, vol. II. part I. pag. 11.

A canzone, which he wrote while he was upon this romantic voyage, is yet extant; it is as follows:—

Irat, et dolent me' en partray
S' yeu non vey est' amour deluench,
E non say qu' ouras la veyray
Car son trop nostras terras luench.

Dieu que fes tout quant ven e vay,
E forma quest' amour luench,
My don poder al cor, car hay
Esper, vezer l' amour de luench.

Segnour, tenes my per veray
L' amour qu' ay vers ella de luench,
Car per un ben que m'en esbay
Hai mille mala, tant soy de luench.

Ja d' autr' amours non jausiray,
S' yeu non iau dest' amour de luench
Qu' na plus bella non en say,
En luec que sia, ny pres, ni luench.*

Which Rymer has thus translated:—

Sad and heavy should I part,
But for this love so far away;
Not knowing what my ways may thwart,
My native land so far away.

Thou that of all things maker art,
And form'st this love so far away;
Give body's strength, then shan't I start
From seeing her so far away.

How true a love to pure desert,
My love to her so far away!
Eas'd once, a thousand times I smart,
Whilst, ah! she is so far away.

None other love, none other dart
I feel, but her's so far away,
But fairer never touch'd an heart,
Than her's that is so far away.†

The emperor Frederic I., or, as he is otherwise called, Frederic Barbarossa, is also celebrated for his poetical talents, of which the following madrigal in the Provençal dialect is given as a specimen:—

Plas my cavallier Frances
E la dama Catalana
El' onrar del Gynoes
E la cour de Kastellana:
Lou kantar Provensalles,
E la danza Triuyzana.
E lou corps Aragonnes,
Et la perla Julliana,
Las mans e kara d' Angles,
E lou donzel de Thuscana.‡

Which Rymer says is current every where, and is thus translated by himself:—

I like in France the chivalry,
The Catalanian lass for me;
The Genoese for working well:
But for a court commend Castile:
For song no country to Provence,
And Treves must carry't for a dance.
The finest shapes in Arragon,
In Juliers they speak in tune,
The English for an hand and face,
For boys, troth, Tuscany's the place.§

Concerning this prince, it is related, that he was of

an invincible courage, of which he gave many signal instances in the wars against the Turks, commenced by the Christians for the recovery of the Holy Land. He was elected emperor in the year 1153, and having reigned about thirty-eight years, was drowned as he was bathing in the Cydnus, a river in Asia Minor, issuing out of Mount Taurus, esteemed one of the coldest in the world ||

ARNALDO DANIELLO, another of the Provençals flourished about the year 1189, and is greatly celebrated by Nostradamus and his commentator Crescimbeni: he composed many comedies and tragedies. It is said that Petrarch has imitated him in many places; and that Daniello not only was a writer of sonnets, madrigals, and other verses, but that he composed the music to many of them. As a proof whereof the following passages are cited:—

Ma canzon prec qe non vus sia en nois vers]¶
Gar si volez grazir lo son, e 'l mos [còde la musica, ei
Fauc prez Arnaut cui qe plaz, o que tire.

Which Crescimbeni thus translates,—

Mia canzon, prego, non vi sia in noia
Che se gradir volete il suono, e 'l motto;
Cui piaccia, o nò, apprezza poco Arnaldo.

And this other,—

Ges per maltrag qem sofri
De ben amar non destoli
Si tot me son endesert
Per lei faz lo son el rima.

Thus translated by Crescimbeni,—

Già per mal tratto ch' io soffersi
Di ben amar non mi distolsi
Si tosto, ch' io mi sono in solitudine,
Per lei faccio lo suono, e la rima.**

One proof of Arnaldo Daniello's reputation as a poet is, that Petrarch taking occasion to mention Arnaldo di Maraviglia, another of the Provençals, styles him 'Il men famoso Arnaldo,' meaning thereby to give the former a higher rank in the class of poets.

Many others, as namely, Guglielmo Adinaro, Folchetto da Marsiglia, Raimondo di Miravalle, Anselmo Faidit, Arnaldo di Maraviglia, Ugo Brunetto, Pietro Raimondo il Prode, Ponzio di Bruello, Rambaldo d' Oranges, Salvarico di Malleone, an English gentleman, Bonifazio Calvi, Percivalle Doria, Giraldo di Bornello, Alberto di Sisterone, Bernardo Rascasso, Pietro de Bonifazi, and others, to the amount of some hundreds in number, occur in the catalogue of Provençal poets, an epithet which was given to them, not because they were of that country, for they were of many countries, but because they cultivated that species of poetry which had its rise in Provence: nor were they less distinguished by their different ranks and conditions in life, than by the respective places of their nativity. Some were men of quality, such as counts and barons, others knights, some lawyers, some soldiers, others merchants, nay some were mechanics, and even pilgrims.

All these were favoured with the protection, and

* Comment. della Volgar Poesia, vol. II. part I. pag. 12.

† Short View of Trag. pag. 72.

‡ Comm. della Volgar Poesia, vol. II. part I. pag. 15.

§ Short View of Tragedy, pag. 75.

|| It is remarkable that Alexander the Great by bathing in this river contracted that illness of which his physician Philip cured him.

¶ Crescimbeni.

** Comment. della volgar Poesia, vol. II. part I. pag. 25.

many of them were maintained in the court of Raimondo Berlinghieri, or Beringhieri, for the orthography of his name is a matter of question.* This prince, who was the son of Idelfonso king of Arragon, was himself an excellent poet, of great liberality, and a patron of learning and ingenious men. The following is the account given of him by Nostradamus:—

‘Raimondo Berlinghieri count of Provence and of ‘Folcachiero, son of Idelfonso, king of Arragon, was ‘a descendant of the family of Berlinghieri of Arragon. ‘He was a good Provençal poet, a lover of learned ‘men, and of those in particular that could write in ‘the Provençal manner; a prince of great gentleness ‘and benignity, and withal so fortunate, that while he ‘held the crown, which he succeeded to on the death ‘of his father, he conquered many countries, and ‘that more by his prudence than by the force of his ‘arms. He married Beatrice, the daughter of Thomas ‘count of Savoy, a very wise, beautiful, and virtuous ‘princess, in praise of whom many of the Provençal ‘poets composed songs and sonnets, in recompence ‘for which she presented them with arms, rich ‘habiliments, and money. By this lady the count had ‘four daughters, beautiful, wise, and virtuous, all of ‘whom were married to kings and sovereign princes, ‘by means of a discreet man named Romeo, who ‘governed the palace of Raimondo a long time: the ‘first of these ladies, named Margarita, was married ‘to Lewis king of France; the second, named ‘Eleonora, to Henry the Third, or, as others write, ‘to Edward king of England; the third, named ‘Sanchia, was married to that Richard king of Eng- ‘land, who was afterwards king of the Romans; and ‘the last, named Beatrice, who by her father’s will ‘was declared heiress of Provence, was married to ‘Charles of Anjou, afterwards king of Naples and ‘Sicily.† It is said of Raimondo, that besides many ‘other instances of favour to the poets of his time and ‘country, he exempted them from the payment of ‘all taxes, and other impositions of a like nature.‡ ‘He died at the age of forty-seven, in the year of our ‘Lord 1245.

The above is the substance of the account given by Nostradamus, and other writers, of this extraordinary personage; and hitherto we may consider him as a shining example of those virtues which contribute to adorn an elevated station; but his character is not free from blemish, and he is not less remarkable in

* Fontanini mentions particularly no fewer than five of the name; the person here spoken of is the last of them. *Della Eloquenza Italiana*, pag. 60.

† Both Nostradamus and his commentator Crescimbeni have betrayed a most gross ignorance of history in this passage: it is very true that Raimond had four daughters, and that they were married to four kings: the poet Dante says:—

Quattro figlie hebbe et ciascuna reina

Raimondo Beringhieri—

Four lovely daughters, each of them a queen,

Had Raimond Beringher.

But neither of them fell to the lot of Richard; his queen was Berengaria or Berenguella, daughter of Sancho of Navarre, and, as Mr. Walpole observes, no princess of Provence. As to the four ladies, they were thus disposed of:—Margaret was married to Lewis king of France, Eleanor to our Henry III, Sanchia to Richard king of the Romans, and nephew to Richard king of England; and Beatrice to Charles king of Naples and Sicily.

‡ It seems that these men were as well knights as poets, for which reason their patron and they have been resembled to king Arthur and his knights of the Round Table. *Fontan. della Eloqu. Ital.* pag. 63.

history for his munificence than his ingratitude; of which the following curious story, related by Velutello, and by Crescimbeni, inserted in his annotations on the life of Raimondo Berlinghieri by Nostradamus, may serve as an instance:—§

‘The liberality of Raimondo, for which he is so ‘celebrated, had reduced him to the necessity of ‘mortgaging his revenues; and at a time when his ‘finances were in great disorder, a pilgrim, the above- ‘named Romeo, who had travelled from the extremity ‘of the West, and had visited the church of St. James ‘of Compostella, arrived at his court; and having by ‘his discreet behaviour acquired the esteem and con- ‘fidence of Raimondo, the latter consulted him on ‘the state of his affairs, and particularly touching ‘the means of disencumbering his revenues. The ‘result of many conferences on this important subject ‘was, a promise on the part of the pilgrim to reform ‘his household, reduce the expenses of his govern- ‘ment, and deliver the count from the hands of ‘usurers, and other persons who had incumbrances ‘on his estates and revenues. The count listened very ‘attentively to this proposal, and finally committed ‘to Romeo the care of his most important concerns, ‘and even the superintendence of his house and ‘family; and in the discharge of his engagements ‘Romeo effected more than he had promised. It has ‘already been mentioned that Raimondo had no other ‘issue than the four daughters above-named, and it ‘was by the exquisite prudence and good manage- ‘ment of this stranger that they were married to so ‘many sovereign princes. The particulars of a con- ‘versation between the count and Romeo, touching ‘the marriage of these ladies, is recorded, and show ‘him to have been of singular discretion, an able ‘negociator, and, in short, a man thoroughly skilled ‘in the affairs of the world: for, with respect to the ‘eldest daughter Margarita, he proposed to the count ‘the marriage of her to Lewis the Good, king of ‘France, and effected it by raising for her a much ‘larger portion than Raimond ever intended to give ‘her, or his circumstances would bear: the reason ‘which Romeo gave for this is worth recording; ‘“If,” said he to the count, “your eldest daughter be ‘married to Lewis, such an alliance cannot fail to ‘facilitate the marriage of the rest;” and the event ‘showed how good a judge he was in such matters.

‘The barons and other great persons about the ‘count could neither behold the services nor the ‘success of Romeo without envy; they insinuated ‘to the count that he had embezzled the public ‘treasure. Raimond attended to their suggestions, ‘and called him to a strict account of his admin- ‘istration, which when he had rendered, Romeo ‘addressed the count in these pathetic terms: ‘Count, ‘“I have served you a long time, and have increased ‘your little revenue to a great one; you have lis- ‘tened to the bad counsel of your barons, and have ‘been deficient in gratitude towards me; I came ‘into your court a poor man, and lived honestly ‘with you; return me the little Mule, the Staff, and

§ *Comment. della volgar Poesia*, vol. II. part I. pag. 78.

"the Pouch, which I brought with me hither, and
"never more expect any service from me."*

'Conscious of the justness of this reproach,
'Raimondo desired that what had past might be
'forgotten, and intreated Romeo to lay aside his
'resolution of quitting his court; but the spirit of
'this honest man was too great to brook such treat-
'ment; he departed as he came, and was never more
'heard of.'

Few of the many authors who have taken occasion
to mention this remarkable story, have forborne to
blame Raimondo for his ingratitude to a man who
had merited not only his protection, but the highest
marks of his favour. The poet Dante has censured
him for it, and borne his testimony to the deserts of
the person thus injured by him, by placing him in
paradise; and considering how easy it was to have
done it, it was almost a wonder that he did not place
his master in a less delightful situation.

The passage in Dante is as follows:—

E dentro à la presente Margarita
Luce la luce di Romeo; di cui
Fu l'opra grande, e bella mal gradita.
Mai Provenzali, che fer contra lui,
Non hanno riso: e però mal camina,
Qual si fa danno del ben fare altrui.
Quattro figlie hebbe, e ciascuna reina,
Ramondo Beringhieri; e ciò gli feci
Romeo persona humile e peregrina:
E poi 'l mosser le parole bieche
A' dimandar ragione à questo giusto;
Che gli assegno sette, e cinque per dieci:
Indi partissi povero, e vetusto:
E se 'l mondo sapesse 'l cor, ch'egli hebbe
Mendicando sua vita à frustro à frustro;
Assai lo loda, e più lo loderebbe.†

Many are the stories related of the Provençal
poets; and there is great reason to suspect that the
history of them abounds with fables. The collection
of their lives by Nostradamus is far from being
a book of the highest authority, and, but for the
Commentary of Crescimbeni, would be of little value:
the labours of these men have nevertheless con-
tributed to throw some light on a very dark part of
literary history, and have furnished some particulars
which better writers than themselves seem not to
have been aware of.

From such a source of poetical fiction as the
country of Provence appears to have been, nothing
less could be expected than a vast profusion of
romances, tales, poems of various kinds, songs, and
other works of invention: it has already been men-
tioned that some of the first and best of the Italian
poets did but improve on the hints which they had
received from the Provençals. Mr. Dryden is of

* 'Conte, io ti ho servito gran tempo, e messoti il piccolo stato in
'grande; e di ciò, per falso consiglio de' tuoi baroni, sei contro a me
'poco grato. Io venni in tua corte povero Romeo, e onestamente sono
'del tuo vivuto: fammi dare il mio muletto, e il mio bordone, e scarcella,
'com'io ci venni, e quetoti ogni servizio.' Crescimbeni 79, from Velutello.
Landino relates the same story, adding, that at his departure Romeo
uttered these words, 'Povero venni, e povero me ne parto; Poor I came,
'and poor I go.' Ibid. 78.

Fontenelle was so affected with the story of this injured man, that he
intended to have written it at length, but was prevented. Near thirty
pages of it may however be seen in the Paris edition of his works,
published in 1758, tome VIII. It is entitled *Histoire du Romieu de
Provence*.

† Paradise, canto VI.

opinion that the celebrated story of Gualterus, mar-
quis of Saluzzo, and Griselda, is of the invention of
Petrarch; but whether it be not originally a Pro-
vençal tale, may admit of doubt: for first Mr.
Dryden's assertion in the preface to his Fables,
namely, that the tale of Grizzild was the invention
of Petrarch, is founded on a mistake; for it is the
last story in the Decameron, and was translated by
Petrarch into Latin, but not till he had received it
from his friend Boccace. This appears clearly from
a letter of Petrarch to Boccace, extant in the Latin
works of the former, and which has been lately
reprinted as an appendix to a modern English version
of this beautiful story by Mr. Ogle: this ingenious
gentleman has taken great pains to trace the origin
of the Clerk of Oxford's tale, for in that form the
story of Griselda comes to the mere English reader;
and every one that views his preface must concur in
opinion with him, that it is of higher antiquity than
even the time of Boccace; and is one of those
Provençal tales which he is supposed to have ampli-
fied and adorned with his usual powers of wit and
elegance. This latter part of Mr. Dryden's assertion,
which is 'that the tale of Grizzild came to Chaucer
from Boccace,' is not less true than the former; for
it was from Petrarch, and that immediately, that
Chaucer received the story which is the subject of
the present inquiry. In the Clerk of Oxenford's
Prologue is this passage:—

I woll you tell a tale, whiche that I
Lerned at Padow, of a worthy clerke,
As preued is by his wordes and his werke.
He is now deed, and nailed in his cheste,
I praye to God fende his foule good reffe.
Fraunces Petrarche, the Laureat poete,
Hight this clerke, whofe rhetorike swete
Enlumined all Italie of poetrie,
As Liuian did of philosophie,
Or lawe, or other arte perticulere;
But deth, that woll not suffre us dwellen here,
But as it were the twinkling of an eye,
Hem both hath slaine, and al we shal dye.

This is decisive evidence that Chaucer took the
tale from Petrarch, and not from Boccace: it is
certain that Petrarch was so delighted with it, that
he got it by heart, and was used to repeat it to his
friends. In the Latin letter above referred to, he
mentions his having shewn it to a friend abroad;
Chaucer is said to have attended the duke of Clarence
upon the ceremony of his marriage with the daugh-
ter of the duke of Milan; and Paulus Jovius ex-
pressly says that Petrarch was present upon that
occasion:† might not therefore Chaucer at this time
receive, and that from Petrarch himself, that narrative
which is the foundation of the Clerk of Oxenford's
tale?

To be short, the Provençals were the fathers of
modern poesy, and if we consider that a great num-
ber of their compositions were calculated to be sung,
as the appellation of Canzoni, by which they are
distinguished, imports; and, if we consider farther
the several occupations of their Musars and Violars,
it cannot be supposed but that they were also pro-

† See the letter prefixed to the Clerk of Oxford's Tale modernized by
George Ogle, Esq., quarto, 1739, pag. vii.

ficients in music; nay, we find that many of their poets were also musicians; and of Arnaldo Daniello it is expressly said, and proved by a passage above-cited from his works, that he was a composer of music, and adapted musical notes to many songs of his own writing

These particulars afford sufficient reason to believe that the Provençals were as well musicians as poets; but to speak of them as musicians, there are farther evidences extant that they were not only singers and players on the viol, the harp, the lute, and other instruments, but composers of musical tunes, in such characters as were used in those times. Crescimbeni speaks of a manuscript in the Vatican library, in the characters of the fourteenth century, in which were written a great number of Canzoni of the Provençal poets, together with the musical notes; one of these, composed by Theobald king of Navarre, of whom it is said that he was equally celebrated both as a prince and a poet, is given at page 186 of this work; and may be deemed a great curiosity, as being perhaps the most ancient song with the musical notes of any extant, since the invention of that method of notation so justly ascribed to Guido and Franco of Liege.

CHAP. XLIV.

ONE of the most obvious divisions of the music of later times, is that which distinguishes between religious and civil or secular music; or, in other words, the music of the church and that of the common people: the former was cultivated by the ecclesiastics, and the latter chiefly by the laity, who at no time can be supposed to have been so insensible of its charms, as not to make it an auxiliary to festivity, and an innocent incentive to mirth and pleasantry. Not only in the palaces of the nobility: at weddings, banquets, and other solemnities, may we conceive music to have made a part of the entertainment; but the natural intercommunity of persons in a lower station, especially the youthful of both sexes, does necessarily presuppose it to have been in frequent use among them also. Farther, we learn that music in those times made a considerable part of the entertainment of such as frequented taverns and houses of low resort. Behold a picture of his own times in the following verses of Chaucer:—

In Flaunders whilom there was a company
Of yonge folk, that haunted foly,
As hafard, riot, ftewes, and tauernes,
Where as with harpes, lutes, and geternes,
Thei dauncen and plaien at dice night and day,
And eten also, over that her might may
Through which they don the deuil sacrifice
Within the deuils temple, in curfed wise
By superfluite abhominable,
Her othes ben so great and so dampnable,
That it is grilly for to here hem fwere,
Our blifed lordes body they al to tere
Hem thought Jews rent him not inough,
And eche of hem at others sinne lough.
And right anon comen in tomblesteres,
Fetis and fmale and yonge foiteres,
Singers with harpes, baudes, and wafereis,
Whiche that ben verely the deuils officers.

PARDONER'S TALK.

These were the divertisements of the idle and the profligate; but the passage above-cited may serve to shew that the music of Lutes, of Harps, and Citterns, even in those days was usual in taverns. As to the music of the court, it was clearly such as the Provençals used; and as to the persons employed in the performance of it, they had no other denomination than that of minstrels. We are told by Stow that the priory of St. Bartholomew, in Smithfield, was founded about the year 1103, by Rahere,* a pleasant, witty gentleman, and therefore in his time called the king's minstrel. Weever, in his *Funeral Monuments*, pag. 433. Dugdale, in his *Monasticon*, vol. II. fol. 166, 167, gives this further account of him:—'That he was born of mean parentage, and that when he attained to the flower of his youth he frequented the houses of the nobles and princes; but not content herewith, would often repair to court, and spend the whole day in sights, banquets, and other trifles, where by sport and flattery he would wheedle the hearts of the great lords to him, and sometimes would thrust himself into the presence of the king, where he would be very officious to obtain his royal favour; and that by these artifices he gained the manor of Aiot, in Hertfordshire, with which he endowed his hospital.'† In the *Pleasant History of Thomas, of Reading*, quarto, 1662, to which perhaps no more credit is due than to mere oral tradition, he is also mentioned, with this additional circumstance, that he was a great musician, and kept a company of minstrels, i. e., fiddlers, who played with silver bows.

These particulars it is true, as they respect the economy of courts, and the recreations and amusements of the higher ranks of men in cities and places of great resort, contain but a partial representation of the manners of the people in general; and leave us

* The curious in matters of antiquity may possibly be pleased to know that a monument of this extraordinary person, not in the least defaced, is yet remaining in the parish church of St. Bartholomew, in Smithfield. This monument was probably erected by Bolton, the last prior of that house, a man remarkable for the great sums of money which he expended in building, (for he built Canonbury, vulgarly Canbury, house near Islington, and repaired and enlarged the priory at his own charge) and indeed for general munificence. He was parson of Harrow, in the county of Middlesex, which parish is situated on the highest hill in the county, and has a church, which king Charles the Second, alluding to one of the topics in the Romish controversy, with a pun, was used to call the Visible church. Hall relates that Bolton, from certain signs and conjunctions of the planets which he had observed, prognosticated a deluge, which would probably drown the whole county, and that therefore he builded him a house at Harrow-on-the-Hill, and furnished it with provision of all things necessary for the space of two months: but this story is refuted by Stow in his *Survey*, with an assertion that he builded no house at Harrow save a Dove-house. One particular more of prior Bolton: we meet with a direct allusion to him in the following passage in the *New Inn*, a comedy of Ben Jonson:—

'Or prior Bolton with his Bolt and Ton.'

The host is debating with himself on a rebus for the sign of his inn, and having determined on one, the Light Heart, intimates that it is as good a device as that of the Bolt and Ton, which had been used to bespeak the name of prior Bolton. This rebus was till of late a very common sign to inns and ale-houses in and about London; from whence by the way the celebrity of this man may be inferred; the device was a tun pierced by an arrow, the feathers thereof appearing above the bung-hole, and the barb beneath. The wit of this rebus is not intelligible unless it be known that the word Bolt is precisely synonymous with Arrow. Chaucer in the *Miller's Tale* uses this simile:—

Winfyng he was as is a iolie colt,

Long as a maft and upright as a bolt.

Shakespeare somewhere speaks of the arrows of Cupid, and by a metonymy calls them Bird-bolts. The proverbial expression, "A fool's bolt is soon shot," is in the mouth of every one; and in common speech we say bolt-upright.

† Vide Chauncy's *History of Hertfordshire*, pag. 322.

at a loss to guess how far music made a part in the ordinary amusements of the people in country towns and villages. But here it is to be observed that at the period of which we are now speaking, namely, that between the beginning of the twelfth, and the middle of the thirteenth century, this country, not to mention others, abounded with monasteries, and other religious houses; and although these seminaries were originally founded and endowed for the purpose of promoting religion and learning, it was not with an equal degree of ardour that the inhabitants of them strove to answer the ends of so laudable an institution. Had the temptations to the monastic life been of such a kind as to affect only the devout, or those who preferred the practice of religion and the study of improvement to every other pursuit, all had been well; but the mischief was that they drew in the young, the gay, and the amorous: and such as thought of nothing so little as counting their rosary, or conning their psalter; can it be supposed that in such a monastery as that of St. Alban, Glastonbury, Croyland, Bermondsey, Chertsey, and many others, in which perhaps half the brethren were under thirty years of age, that the Scriptures, the Fathers, or the Schoolmen, were the books chiefly studied? or that the charms of a village beauty might not frequently direct their attention to those authors who teach the shortest way to a female heart, and have reduced the passion of love to a system?

The manners of the people at this time were in general very coarse, and from the nature of the civil constitution of this country, many of the females were in a state of absolute bondage: a connection with a damsel of this stamp hardly deserved the name of an Amour; it was an intimacy contracted without thought or reflection. But between the daughter of a Villain, and the heiress of an Esquire or Franklein, the difference was very great; these latter may be supposed to have entertained sentiments suitable to their rank; and to engage the affections of such as these, the arts of address, and all the blandishments of love were in a great measure necessary. The wife of the carpenter Osney, of whom Chaucer has given the following lively description,—

Faire was this yong wife, and there withal
As any wilele her bodie gentle and small,
A feinte she weared, barred all with filke,
A barme cloth, as white as morowe milke;
Upon her lendes, full of many a gore,
Whit was her smock, and embrouded all bifore,
And eke behinde on her colere about,
Of cole blacke filke, within and eke without;
The tapes of her white volipere
Were of the same sute of her colere,
Her filet brode of filke, and fet full hye
And fickerly, she had a likerous iye;
Full small ipulled were her browes two,
And tho were bent, and black as any flo.
She was moche more blisfull for to see
Then is the newe Perienet tree,
And softer than the woll is of a weather,
And by her girdel hong a purfe of leather,
Taffed with filke, and perled with latoun,*
In all this worlde, to seken up and down,
There nis no man so wif, that couth thence
So gaie a popelote, or fo gaie a wenche;

* *i. e.* Tasselled with silk, and having an edging of brass or tinsel lace. Perl is the edge or extremity of lace.

Full brighter was the thinyng of her hewe,
Than in the toure the Noble forged newe.
But of her song, it was so loud and yerne,
As any swalowe fittyng on a berne:
Thereto she couthe skippe, and make a game
As any kiddy or calfe folowyng his dame;
Her mouth was swete, as braket or the meth,
Or horde of apples, lying in haie or heth;
Winfyng she was, as is a iolie colt,
Long as a maffe, and upright as a bolt.
A brooche she bare on her lowe colere,
As brode as the boffe of a bucklere;
Her shoes were laced on her legges hie
She was a primrose and piggefinie,
For any lorde to ligen in his bedde,
Or yet for any good yoman to wedde.—MILLER'S TALE.

is courted with songs to the music of a gay sautrie, on which her lover Nicholas the scholar of Oxford

— made on nightes melodie
So swetely that all the chamber rong,
And *Angelus ad Virginem* he song,
And after that he song the kynges note,
Full oft blessed was his mery throte.—Ibid.

Her other lover, Absolon, the parish-clerk sung to the music of his geterne and his ribible, or fiddle. His picture is admirably drawn, and his manner of courtship thus represented by Chaucer:—

A merie child he was, fo God me saue,
Well coud he let blood, clippe and shaue,
And make a charter of lond, and acquitaunce;
In twentie maner could he trippe and daunce,
After the schole of Oxenforde tho,
And with his legges casten to and fro
And plaie songes on a fmaile ribible; †
Therto he song sometyne a loude quynible. ‡
And as well coud he plaie on a geterne,
In all the toun nas brewhousfe ne tauerne
That he ne vifited with his folas,
There any gaie tapstere was. * * *

This Absolon that was iolly and gaie,
Goeth with a censer on a Sondaie,
Censyng the wiues of the parische faste,
And many a louely look on hem he caste,
And namely on this carpenters wife
To look on her hym thought a merie life,
She was so propre, and swete as licorous;
I dare well saie if she had been a mous,
And he a catte, he would have her hent anon.

This parische clerke, this iolly Absolon,
Hath in his harte soch a loue longyng,
That of no wife he tooke none offeryng,
For curtesie he saied he would none.
The moone, when it was night, bright shone,

† *RIBIBLE* is by Mr. Urry, in his Glossary to Chaucer, from Speght, a former editor, rendered a fiddle or gittern. It seem that *Rebec* is a Moorish word, signifying an instrument with two strings, played on with a bow. The Moors brought it into Spain, whence it passed into Italy, and obtained the appellation of *Ribeca*; from whence the English *Rebec*, which *Phillipa*, and others after him, render a fiddle with three strings. The *Rebec* or *Rebah* is mentioned in *Shaw's Travels* as a Turkish or Moorish instrument now in use; and is probably an improvement on the Arabian *Pandura*, described by *Marsennus*, and previously mentioned in this work, pag. 86.

‡ Mr. Urry, on the same authority, makes this word synonymous with treble. This signification is to be doubted; the word may rather mean a high part, such as in madrigals and motets is usually distinguished by the word *quintus*, which in general lies above the tenor, and is sometimes between that and the contratenor; and at others between the contratenor and the superius or treble; and from the word *quintus* *quynible* may possibly be derived; and this is the more probable, for that in an ancient manuscript treatise on descant, of which an account will hereafter be given, the accords for the *quatrilib* sight are enumerated; and *quatrilib* will hardly be thought a wider deviation from its radical term than *quynible* is from *quintus*. Stow records an endowment by the will of a citizen of London, dated in 1492, for a cananble to sing a twelvemonth after his decease in the church of St. Sepulchre; and conjectures that by *Cananble* we are to understand a singing priest. *Surv. of London*, with *Additions* by Styrpe, book III. pag. 341. And quere if *Cananble* in this place may not mean *Quynible*, *i. e.* a priest with a voice of a high pitch?

And Abfulon his Geterne* hath itake,
 For paramours he thought for to wake,
 And fourth he goeth, jelous and amerous,
 Till he came to the carpenter's hous
 A little after the cockes had icrow,
 And dressed him by a shot windowe
 That was upon the carpenter's wall;
 He fingeth in his voice gentle and small,
 Now dere ladie, if thy will be
 I praie you that ye would rewe on me.
 Full well accordyng to his Geternyng,

This carpentere awoke and heard him syng.—Ibid.

His manner of courtship, and the arts he made use of to gain the favour of his mistress, are farther related in the following lines:—

Fro daie to daie, this iolly Abfulon
 So woeth her, that bym was wo bygon;
 He waketh all the night, and all the daie.
 He kembeth his lockes brode, and made him gaie;
 He woeth her by meanes and brocage,
 And fware that he would been her owne page.
 He Singeth brokkyng as a nightingale.
 He sent her piment, meth, and spiced ale,
 And wafres piping hotte out of the glede,
 And for she was of toun, he profered her mede;
 For some folke wolle be wonne for richeffe,
 And some for strokes, and some with gentleness.—Ibid.

If so many arts were necessary to win the heart of the youthful wife of a carpenter, what may we suppose were practised to obtain the affections of females in a higher station of life? Who were qualified to compose verses, songs, and sonnets, but young men endowed with a competent share of learning? and who were so likely to compose musical tunes as those who had the means of acquiring the rudiments of the science in those fraternities of which they were severally members, and in which they were then only taught? Even the satires and bobbing rhymes, as Camden calls them, of those days, though they were levelled at the vices of the clergy, were written by clergymen. Lydgate was a monk of Bury, and Walter de Mape, of whom Camden relates that in the time of king Henry the Second he filled all England with his merriments, was arch-deacon of Oxford. He in truth was not so much a satirist on the vices of other men, as an apologist for his own, and these by his own confession were intemperance and lewdness; which he attempts to excuse in certain Latin verses, which may be found in the book entitled Remains concerning Britain.

From these particulars, and indeed from the general ignorance of the laity, we may fairly conclude that the knowledge of music was in a great measure confined to the clergy; and that they for the most part were the authors and composers of those Songs and Ballads with the tunes adapted to them, which were the ordinary amusements of the common people; and these were as various in their kinds as the genius, temper, and qualifications of their authors. Some were nothing more than the legends of saints, in such kind of metre as that in which the Chronicles of Robert of Gloucester and of Peter Langtoft and others are written; others were metrical romances; others were songs of piety and devotion, but of such a kind, as is hard to conceive of at this time. And

* It is intimated by Speght and Urry, in the Glossary to Chaucer, that by the word Giterne is meant a fiddle; but more probably it is a corruption of Clittern, a very different instrument.

here it is to be noted, that as the Psalms were not then translated into the vulgar tongue, the common people wanted much of that comfort and solace, which they administered to our great grandmothers; and that in those times the principal exercises of a devout heart were the singing such songs as are above-mentioned. These had frequently for their subject the sufferings of the primitive christians, or the virtues of some particular saint, but much oftner an exhortation from Christ himself, represented in the pangs of his crucifixion, adjuring his hearers by the nails which fastened his hands and feet, by the crown of thorns on his head, by the wound in his side, and all the calamitous circumstances of his passion, to pity and love him. Of the compositions of this kind the following is an authentic specimen:—

Wofully arayd
 My blod man for the ran,
 Yt may not be nayed,
 My body bloo and wan,
 Wofully arayd.
 Behold me I pray the
 With all thy hool refon
 And be not so hard hartyd,
 For thys encheson;
 Syth I for thy fowls sake,
 Was slayn in gode feson,
 Begyld and betrayd
 By Judas fals trefon.
 Unkyndly entretyd
 With sharp cord fore frettyd,
 The Jewes me thretyd,
 They mowed they gyren;
 They scorned me,
 Condemned to deth,
 As thou mayst see,
 Wofully arayd.
 Thus nayked am I nayled,
 O man for thy sake,
 I love thee then love me,
 Why slepest thou? awake,
 Remember my tender hart rote
 For the brake.
 What payns
 My vaynes
 Constraynd to crake,
 Thus tuggyd to and fro,
 Thus wrappyd all in woo,
 In most cruel wyfe,
 Like a lambe offeryd in sacrifice,
 Wofully arayd.
 Of sharpe thorn I have worne
 A croune on my hed
 So payned,
 So strayned,
 So rewfully red,
 Thus bobbid,
 Thus robbid,
 Thus for thy lone dede
 Enfaynd,
 Not deynyd
 My blod for to shed.
 My feet and hands fore,
 The sturdy nayls bore,
 What might I suffer more
 Than I have done O man for the!
 Cum when ye lyft,
 Welcum to me;
 My bloud man for the ranne,
 My body bloo and wanne,
 Wofully arayd.†

† Skelton, in his poem entitled the Crown of Laurell, alludes to this

CHAP. XLV.

IN a manuscript, of which a full account will be given hereafter, as ancient as the year 1326, mention is made of ballads and roundelays; these were no other than popular songs, and we find that Chaucer himself composed many such. Stow collected his ballads, and they were published for the first time in an edition of Chaucer printed by John Kynge in 1561; * they are of various kinds, some moral, others descriptive, and others satirical.

One John Shirley, who lived about 1440, made a large collection, consisting of many volumes of compositions of this kind by Chaucer, Lydgate, and other writers. Stowe had once in his possession one of these volumes, entitled 'A Boke cleped the abstracte brevyaire, compyled of diverse balades, roundels, virilays,† tragedies, envoys, complaints, moralities, storyes practysed, and eke devysed and ymagined, as it sheweth here followyng, collected by John Shirley,‡ which is yet extant, and remains part of the Ashmolean collection of manuscripts; and the late Mr. Ames had in his possession a folio volume of ballads in manuscript, composed by one John Lucas, about the year 1450, which is probably yet in being.

There are hardly any of the tunes of these ancient ballads but must be supposed to be irretrievably lost. One indeed to that in Chaucer's works, beginning, 'I have a lady,' is to be found in a vellum manuscript, formerly in the hands of Dr. Robert Fairfax, mentioned in Morley's Catalogue, who lived about 1500, and which afterwards became part of the collection of Mr. Ralph Thoresby, and is mentioned in the list of his curiosities, at the end of his History of Leeds; the tune was composed by Cornysh, who lived temp. Hen. VIII., but then the ballad itself is not so old as is pretended, for in the Life of Chaucer, prefixed to Urry's edition, it is proved to have been written after his death.

Nor, which is much to be lamented, have we any dance-tunes so ancient as the year 1400. The oldest country-dance-tune now extant being that known by the name of Sellenger's, i. e. St. Leger's Round, which may be traced back to nearly the time of Hen. VIII., for Bird wrought it into a virginal-lesson for lady Nevil:§ that they must have had such sort of musical compositions, and those regular ones, long before, is in the highest degree probable, since it is certain that the measures of time were invented and reduced to rule at least before the year 1340, which

song in a manner that seems to indicate that it was of his writing. See his poems, 12mo. 1736, pag. 54.

* This is the edition referred to in all the quotations from Chaucer that occur in the course of this work.

† Roundel and Virilay are words nearly synonymous; both are supposed to signify a rustic song or ballad, as in truth they do, but with this difference, the roundel ever begins and ends with the same sentence, the virilay is under no such restriction.

‡ Vid. Tann. Biblioth. pag. 668.

§ The knowledge of this fact is derived from a curious manuscript volume yet extant, containing a great number of lessons all composed by Bird: the book is in the hand writing of John Baldwine, of Windsor, and appears to have been finished anno 1591; it is very richly bound, and has these words, 'My Layde Nevell's booke' impressed in gold letters on the covers, and the family arms depicted on one of the blank leaves. The first lesson in it is entitled Lady Nevell's Grownde; from all which particulars it is to be supposed that the book itself was a present from Bird himself to lady Nevill, who perhaps might have been his scholar.

is more than half a century earlier, and consequently that the musicians of that time had the same means of composing them as we have now.

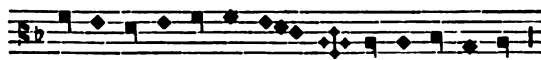
The most ancient English song with the musical notes perhaps any where extant, is now in the British Museum, concerning which Mr. Wanley, who was as good a musician as he was a judicious collector, has given this account in that part of the Catalogue of the Harleian Manuscripts, which he himself drew up. ||

'*Antiphona PERSPICE XP'TICOLA, Miniatis Litteris scripta; supra quam, tot Syllabis, nigro Atramento seu communi, cernuntur Verba Anglicana, cum Notis Musicis, à quatuor Cantoribus seriatim atq; simul Canenda. Hoc genus Contrapunctionis sive Compositionis, CANONEM vocant Musici moderni; Anglicè (cum verba, sicut in præsentì Cantico, sint omnino ludicra) A CATCH; vetustioribus verò, uti ex præsentì Codice videre est, nuncupabatur ROTA. Hanc ROTAM cantare possunt quatuor Socij; a paucioribus autem quam a Tribus, vel Saltem Duobus, non debet dici, preter eos qui dicunt PEDEM. Canitur autem sic; Tacentibus ceteris, unus inchoat cum hijs qui tenent PEDEM, et cum venerit ad primam Notam post Crucem, inchoat alius; et sic de ceteris, &c. fol. 9. b.*

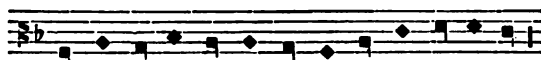
'*Notandum etiam, hoc ludicræ Cantionis apud Anglos, Regulis quoque Musices quodam modo astricta, avulsa in super Linguâ exhibitæ, Exemplar esse omnium quæ adhuc mihi videre contigit Antiquissimum.*

The following is an exact copy of the song above described, with the directions for singing it:—

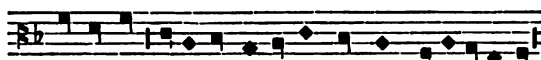
CANON in the UNISON,
From an ancient MS. in the British Museum.



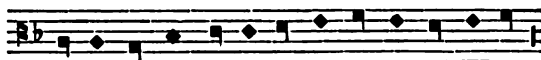
SUMER is i cumen in, Lhude sing Cuccu,
Per-epi-ce chris-ti-so-la que dig-na-ci-o,



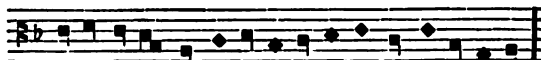
groweth seed and bloweth mead, and springth the wde nu,
ce-li-ous a-gri-co-la pro vi-tis vi-ci-o,



Sing Cuccu, Awe bleteth after lomb, lhouth after calve cu,
Fi-k-o, non parcons ex-po-su-ut mor-tis ex-i-ci-o,



Bul-luc sterteth, Bucke vert-eth, mu-rie sing cuc-cu,
Qui cap-ti-vos, Se-mi-vi-vos, a sup-pli-ci-o,



Cuccu cuc-cu, wel sings thu cuc-cu, ne swik thu naver nu.
Vi-tis donat, et secum co-ro-nat in ce-li-so-li-o.

|| The number of the manuscript, as it stands in the printed catalogue, is 978. The volume contains divers tracts on music, and other subjects; and the song above spoken of is numbered 5, that is to say, it has the fifth place in vol. 978.

Hanc rotam cantare possunt quatuor socii, A paucioribus autem quam a tribus, vel saltem duobus, non debet dici, prater eos qui dicunt pedem. Canitur autem sic; Tacentibus ceteris unus inchoat cum hijs qui tenent pedem, et cum venerit ad primam notam post oruocem, inchoat alius; et sic de ceteris. Singuli vero repaunt ad pausaciones scriptas, et non alibi, spacio unius longas notas.

Hoc repetit unus quoties opus est, faciens pausacionem in fine.

Pes Sing cucu nu, sing cucu.

Hoc dicit alius pausans in medio et non in fine, sed immediate repetens principium.

Sing cucu, sing cucu nu.

It is to be noted that in the Harleian MS. the stave on which the above composition is written consists of red lines, and that the Latin words above given are of the same colour, as are also the directions for singing the Pes, as it is called. Du Cange voce Rota, remarks that this word sometimes signifies a hymn. The words 'Hanc rotam cantare possunt,' &c. may therefore be supposed to refer to the Latin 'Perspice Christicola,' and not to the English 'Sumer 'is icumen in,' &c. which latter stand in need of an explanation, and are probably to be thus rendered:—

Summer is a-coming in,
Loud sing cuckow.
Groweth seed,
And bloweth mead; *
And spring'th the wood new.
Ewe bleateth after lamb,
Loweth after calf cow:
Bullock starteth,
Buck verteth, †
Merry sing cuckow,
Well sing'st thou cuckow,
Nor cease to sing [or labour thy song] nu [now]. ‡

SUMER is i - cu - men in, Lhude sing Cuc - cu. Grow - eth

SUMER is i - cu - men in, Lhude

SUMER

Sing Cuc - cu nu, Sing cuc - eu, sing

Sing Cuc - cu, Sing cuc - eu nu, sing

* The flowers in the meadow.

† Goeth to vert, i. e., to harbour among the fern.

‡ It is observable that the most ancient species of musical imitation is the song of the cuckow, which must appear to be a natural and very obvious subject for it. Innumerable are the instances that might be produced to this purpose; a very fine madrigal in three parts, composed by Thomas Weelkes, organist of Chichester cathedral about the year 1600, beginning 'Thris the Nightingale the Organ of Delight,' has in it the cuckow's song. Another of the same kind, not less excellent, in four parts, beginning, 'Thris sleepeth thou!' occurs in the Madrigals of John Bennet, published in 1599. Vivaldi's cuckow concerto is well known, as is also that of Lampe, composed about thirty years ago.

The song of the cuckow is in truth but one interval, that is to say a minor third, terminated in the scale by a L A M A acute, and e sot. V. A. Vide Kirch. Musurg. tom I. Iconism. III., nevertheless, in all the instances above referred to, it is defined by the interval of a major third.

§ This assertion is grounded on the authority of a book intitled *Prænotiones Musicae Poeticæ, seu de Compositione Cantus*, written by Johannes Nucius, printed in 1613, wherein, to give it at length,

As to the music, it is clearly of that species of composition known by the name of canon in the Unison. It is calculated for four voices, with the addition of two for the Pes, as it is called, which is a kind of ground, and is the basis of the harmony. Mr. Wanley has not ventured precisely to ascertain the antiquity of this venerable musical relic, but the following observations will go near to fix it to about the middle of the fifteenth century. It has already been shown that the primitive form of polyphonus or symphoniac music was counterpoint, i. e. that kind of composition which consisted in the opposition of note to note: the invention of the cantus mensurabilis made no alteration in this respect, for though it introduced a diversity in the measures of the notes as they stood related to each other, the correspondence of long and short quantities was exact and uniform in the several parts.

To counterpoint succeeded the cantus figuratus, in which it is well known that the correspondence, in respect of time, is not between note and note, but rather between the greater measures; or, to speak with the moderns, between bar and bar, in each part; and this appears to have been the invention of John Dunstable, who wrote on the cantus mensurabilis, and died in 1455, and will be spoken of in his place. § Now the composition above given is evidently of the figurate kind, and it follows from the premises, that it could not have existed before the time when John of Dunstable appears to have lived. The structure of it will be best understood by the following score in the more modern method of notation:—

is the following remarkable passage, intended by the author as an answer to the question, 'Quem dicimus poeticum musicum?':—

'Qui non solum precepta musicae apprime intelligit, et iuxta ea rectè, ac bene modulatur, sed qui propriis ingentis penetratibiles tentans, novas cantilenas cudit, et flexibiles sones pro verborum pondere textibus aptat. Talem artificem Glareanus symphonietæ appellatione describit. Sicut Phonasci nomine cantorem insinuat. Porro tales artifices claruerunt, primum circa annum Christi 1400, aut certè paulò post. Duax-tapli Anglus à quo primum figuralem musicam inventam tradunt.'

Thomas Ravenscroft, the author of A brief Discourse of the true but neglected Use of characterizing the Degrees in measurable Music, quarto, 1614, asserts that John of Dunstable was the first that invented musical composition, in which, taking the above-cited passage for his authority, he appears most grossly to have erred. Musical composition must certainly be as ancient as the invention of characters to denote it; nay, it may be conjectured that counterpoint was known and practised before the time spoken of, but as to figurate music, we are at a loss for evidence of its existence before the time of Dunstable, and in truth it is the invention of figurate music only that is ascribed to him by Nucius.

seed and blow - eth mead, and springth the wde nu. Sing cuc -

sing cuc - cu, Grow - eth seed and blow - eth mead, and springth the wde

is i - cu - men in, Lhude sing cuc - cu. Grow - eth seed and

SUMER is i - cu - men in, Lhude sing cuc -

cuc - - cu nu, sing cuc - cu, sing cuc - -

cuc - - cu, sing cuc - cu nu, sing cuc - -

- - cu. Awe ble - teth af - ter lomb, lhouth af - ter calve cu,

nu, sing cuc - - cu. Awe ble - teth af - ter

blow - eth mead, and springth the wde nu. sing cuc - cu.

- - cu. Grow - eth seed and blow - eth mead, and springth the wde nu.

- - cu nu, sing cuc - cu, sing cuc - cu

- - cu, sing cuc - cu nu, sing cuc - cu,

Bal - luc stert - eth, bucke ver - teth, mu - rie sing cuc - cu,

lomb, lhouth af - ter calve cu, Bal - luc stert - eth, bucke ver - teth,

Awe ble - teth af - ter lomb, lhouth af - ter calve, cu,

Sing cuc - cu. Awe ble - teth af - ter lomb, lhouth

nu, sing cuc - cu, sing cuc - cu nu,

sing cuc - cu nu, sing cuc - cu nu,

cuc - cu, cuc - - cu, wel sings thu cuc - cu, ne swik thu
 mu - rie sing cuc - cu, cuc - cu, cuc - cu, wel sings
 Bul - luc stert - eth, bucke ver - teth, mu - rie sing cuc - cu, sing
 af - ter calve cu, Bul - luc stert - eth, bucke ver - teth, mu - rie
 sing cuc - cu, sing cuc - cu nu, sing
 sing cuc - cu nu, sing cuc - cu, sing
 na - ver nu. SUMER is i - cu - men in Lhude sing cuc
 thu cuc - cu, ne swik thu na - ver nu. SUMER is i -
 cuc - cu, cuc - cu, wel sings thu cuc - cu, ne swik thu na - ver
 sing cuc - cu, cuc - cu. cuc - cu, wel sings thu cuc -
 cuc - - cu, sing cuc - cu nu, sing cuc - -
 cuc - - cu nu, sing cuc - cu, sing cuc - -
 - - cu. Grow - eth seed and blow - eth mead, and springth the wde nu.
 - - cu - men in, Lhude sing cuc - cu. Grow - eth seed and blow - eth
 nu. SUMER is i - cu - men in, Lhude sing cuc - cu.
 - - cu, ne swik thu na - ver nu. SUMER is i - cu - men
 - - cu, sing cuc - cu nu, sing cuc - - cu.
 - - cu, nu, sing cuc - cu, sing cuc - - cu.

The history of music, so far as regards the use and practice of it, is so nearly connected with that of civil life, as in a regular deduction of it to require the greatest degree of attention to the customs and modes of living peculiar to different periods: a knowledge of these is not to be derived from history, properly so called, which has to do chiefly with great events; and were it not for the accurate and lively representation of the manners of the old Italians, and the not less ancient English, contained in the writings of Boccace and Chaucer, the inquisitive part of mankind would be much at a loss for the characteristics of the fourteenth century. Happily these authors have furnished the means of investigating this subject, and from them we are enabled to frame an idea of the manners, the amusements, the conversation, garb, and many other particulars of their contemporaries.

The Decameron of Boccace, and the Canterbury Tales of Chaucer, appear each to have been composed with a view to convey instruction and delight, at a time when the world stood greatly in need of the former; and by examples drawn from feigned history, to represent the consequences of virtue and vice; and in this respect it may be said that the authors of both these works appear to have had the same common end in view, but in the prosecution of this design each appears to have pursued a different method. Boccace, a native of Italy, and a near neighbour to that country where all the powers of wit and invention had been exerted for upwards of two centuries in fictions of the most pleasing kind, had opportunities of selecting from a great variety such as were fittest for his purpose. Chaucer, perhaps not over solicitous to explore those regions of fancy, contented himself with what was laid before him, and preferred the labour of refining the metal to that of digging the ore.

Farther, we may observe that besides the ends of instruction and delight, which each of these great masters of the science of human life proposed, they meant also to exhibit a view of the manners of their respective countries, Italy and England, with this difference, that the former has illustrated his subject by a series of conversations of persons of the most refined understanding, whereas the latter, without being at the pains attending such a method of selection, has feigned an assemblage of persons of different ranks, the most various and artful that can be imagined, and with an amazing propriety has made each of them the type of a peculiar character.

To begin with Boccace. A plague which happened in the city of Florence, in the year of our Lord 1348, suggests to him the fiction that seven ladies, discreet, nobly descended, and perfectly accomplished; the youngest not less than eighteen, nor the eldest exceeding twenty-eight years of age; their names Pampinea, Fiammetta, Philomena, Emilia, Lauretta, Neiphile, and Eliza, meet together at a church, and, after their devotions ended, enter into discourse upon the calamities of the times: to avoid the infection they agree to retire a small distance from the town, to live in common, and spend part of the summer in contemplating the beauties of nature, and in the ingenious and delightful conversation of each other;

but foreseeing the inconveniences that must have followed from the want of companions of the other sex, they add to their number Pamphilo, Philostrate, and Dioneo, three well-bred young gentlemen, the admirers and honourable lovers of three of these accomplished ladies. They retire to a spacious and well furnished villa. Pampinea is elected their queen for one day, with power to appoint her successor; different offices are assigned to their attendants; wines, and other necessities, chess-boards, backgammon-tables, cards, dice, books, and musical instruments are provided; the heat of the season excluding the recreations of riding, walking, dancing, and many others, for some part of the day, they agree to devote the middle of it to the telling of stories in rotation: the conversations of this kind take up ten days, each is the narrator of ten novels. Such is the structure of the Decameron.

The highest sense of virtue, of honour, and religion, and the most exact attention to the forms of civility, are observable in the behaviour of these ladies and gentlemen; nevertheless many of the stories told by them are of such a kind as to excite our wonder that well-bred men could relate, or modest women hear them; from whence this inference may be fairly drawn, that although nature may be said to be ever the same, yet human manners are perpetually changing; particular virtues and vices predominate at different periods, chastity of sentiment and purity of expression are the characteristics of the age we live in.

But to pursue more closely the present purpose, we find from the novels of Boccace that Music made a considerable part in the entertainment of all ranks of people. In the introduction we are told that on the first day after they had completed the arrangement of this little community, when dinner was over, as they all could dance, and some both play and sing well, the queen ordered in the musical instruments, and commanded Dioneo to take a lute, and Fiammetta 'una vivola,' a viol, to the music whereof they danced, and afterwards sang. And at the end of the first Giornata we are told that Lauretta danced, Emilia singing to her, and Dioneo playing upon the lute: the canzone, or song, which is a very elegant composition, is given at length. At the end of the third Giornata, Dioneo, by whom we are to understand Boccace himself, and Fiammetta, under whom is shadowed his mistress, the natural daughter of Robert king of Naples, sing together the story of Guiglielmo and the lady of Vergiu, while Philomena and Pamphilo play at chess; and at the end of the seventh Giornata the same persons are represented singing together the story of Palamon and Arcite, after which the whole company dance to the music, 'della Cornamusa,' of a bagpipe, played on by Tindarus, a domestic of one of the ladies, and therefore a fit person to perform on so homely an instrument.

These representations, fictitious as they undoubtedly are, may nevertheless serve to ascertain the antiquity of those musical instruments, the Lute, the Viol, and the Cornamusa, or Bagpipe; they also prove to some degree the antiquity of that kind of measured dance,

which was originally invented to display all the graces and elegancies of a beautiful form, and is at this day esteemed one of the requisites in a polite education.

CHAP. XLVI.

It remains now to speak of our ancient English poet, and from that copious fund of intelligence and pleasantry the Canterbury Tales, to select such particulars as will best illustrate the subject now under consideration. The narrative supposes that twenty-nine persons of both sexes, of professions and employments as different as invention could suggest, together with Chaucer himself, making in all thirty, sat out from the Tabarde inn in Southwark * on a pilgrimage to the shrine of St. Thomas Becket in the cathedral church of Canterbury; and that this motley company consisted of a knight, a squire his son, and his yeoman or servant; a prioress, a nun, and three priests her attendants; a monk, a friar, a merchant, a clerk of Oxford, a serjeant at law, a franklin or gentleman, a haberdasher, a carpenter, a weaver, a dyer, a tapiser or maker of tapestry, a cook, a shipman or master of a trading vessel, a doctor of physic, the wife of a weaver of Bath, a parson, a plowman, or, as we should now call such a one, a farmer, a miller, a manciple, a reeve, a summoner, a pardoner, and Chaucer himself, who was a courtier, a scholar, and a poet. The characters of these, drawn with such skill, and painted in such lively colours, that the persons represented by them seem to pass in review before us, precede, and are therefore called the Prologues to, the Tales. After the prologues follows a relation of the conversation of the pilgrims at their supper, in which the host desires to make one of the company, which being assented to, he proposes that in the way to Canterbury each should tell two tales, and on their return the same number; and he that recounts the best shall be treated with a supper by his companions. To this they assent, and early in the morning set out, taking the host for their guide. They halt at St. Thomas's Watering, a place well known near Southwark, and the host proposes drawing cuts to determine who shall tell the first tale; the lot falls upon the knight, as having drawn the shortest, and making a brief apology (wherein his discretion and courtesy are remarkable) he begins by a recital of the knightly story of Palamon and Arcite.†

* This inn was formerly the lodging of the abbot of Hyde near Winchester, the sign was a Tabarde, a word signifying a short jacket, or sleeveless coat, whole before, open on both sides, with a square collar and hanging sleeves. Stow's Survey, lib. IV. chap. 1. From the wearing of this garment some of those on the foundation at Queen's college in Oxford are called Taberdaril. The servants of their respective masters at the great call of serjeants in the year 1736, walked in coats of this form, and of a violet colour, in the procession from the Middle Temple hall to Westminster. It was anciently the proper habit of a servant, and there cannot be a clearer proof of it than that all the knaves in a pack of cards are dressed in it. A few years ago the sign of this inn was the Talbot or beagle, an evidence that the signification of the word Tabarde was at least unknown to its then owner. The host in Chaucer's time was Henry Bailie, a merry fellow, the humour of whose character, which is admirably drawn by the poet, is greatly heightened by the circumstance of his having a shrew for his wife. It is with great justice that Mr. Dryden remarks that from that precise and judicious enumeration of circumstances contained in this and the other characters of Chaucer, 'he was enabled to form an idea of the humours, the features, and the 'very dress of the pilgrims, as distinctly as if he had supped with them' at the Tabarde in Southwark.

† It is very remarkable that Cowley could never relish the humour

In the prologues the following particulars relating to music are observable; and first in that of the squire it appears that

He coude songes make and wel endite,
Juft, and eke daunce, portray, and wel write.

And that the prioress,

- - - - - called dame Eglyntine,
Ful wel she song the service devine,

Of the Frere it is said that

- - - certainly he had a mery note,
Wel coude he finge and plain on a Rote.

And that

In harping whan he had song
His eyen twinkled in his hed aright,
As done the sterres in a frosty night.

From the character of the clerk of Oxenforde we learn that the Fiddle was an instrument in use in the time of Chaucer.

For him was leuer to haue at his beddes heed
Twenty bookes cladde with blacke or reed,
Of Aristotile and of his philosophie,
Than robes riche, or fiddell, or gay sautrie.

And of the miller the author relates that

A baggepipe well couth he blowe and soun.

In the Cook's Tale is an intimation that the apprentice therein mentioned could sing and hop, i. e. dance, and play on the Getron and Ribible; and in the romaunt of the Rose is the following passage:—

There mightest thou se thefe Flutours,
Minfrals, and eke Joglours,
That well to finge did her paine,
Some fong songes of Loraine,
For in Loraine her notes be
Ful sweter than in this counstre.—Fol. 119, b.

From the passages above-cited we learn that the son of a knight, educated in a manner suitable to his birth, might be supposed to be able to read, write, dance, pourtray, and make verses. That in convents the nuns sang the service to the musical notes. That the Lute, the Rote, the Fiddle, the Sautrie, the Bagpipe, the Getron, the Ribible, and the Flute, were instruments in common use: Speght supposes the appellative Rote to signify a musical instrument used in Wales, mistaking the word, as Mr. Urry suspects, for Crota, a crowd; but Dr. Johnson in his Dictionary, makes it to mean a Harp, and cites the following passage from Spenser:—

Worthy of great Phæbus rote,
The triumphs of Phlegrean Jove he wrote,
That all the gods admired his lofty note.

But in the Confessio Amantis of Gower is the following passage:—

He taught hir, till she was certene
Of Harpe, Citole, † and of Riote,
With many a tewne, and many a note.—Fol. 178, b.

of Chaucer. Dryden relates the fact, and gives his authority for it in these words:—'I have often heard the late earl of Leicester say that Mr. Cowley himself was of opinion that Chaucer was a dry old fashioned wit, not worth receiving; and that having read him over at my lord's request, he declared he had no taste of him.' Pref. to Dryden's Fables.

This fact is as difficult to account for as another of a similar kind; Mr. Handel made no secret of declaring himself totally insensible to the excellencies of Purcell's compositions.

† CITOLE, in the passage above-cited from Gower is derived from CISTELLA, a little chest, and probably means a dulcimer, which is in truth no other than a little chest or box with strings on the lid or top.

Upon which it is observable that the words Harpe and Riote, or Rote, occur in the same line, which circumstance imports at least a doubt, whether in strictness of speech they can be said to be synonymous. The word Sautrie is clearly a corruption of Psalter, a kind of harp; Getron or Getern has the same signification with Cittern; and Ribible or Rebible, is said by Speght and Urry to mean a Fiddle, and sometimes a Getern. The names of certain other instruments, not so easy to explain, are alluded to in the following list of musicians attending king Edw. III. extracted from a manuscript-roll of the officers of his household, communicated by the late Mr. Hardinge of the House of Commons:—*

Mynstrella.	Trompetters	-	-	-	5
	Cytelers†	-	-	-	1
	Pypers	-	-	-	5
	Tabrete	-	-	-	1
	Mabriers	-	-	-	1
	Clarions	-	-	-	2
	Fedeler	-	-	-	1
	Wayghtes‡	-	-	-	3

As to the organ, it was clearly used in churches, long before the time of Chaucer: he mentions it in the tale of the Nun's Priest; and what is somewhat remarkable, with epithet of merry,—

His voice was merier than the mery Orgon
On masse daies, that in the churches gon.

Other particulars occur in the prologues, which as they relate to modes of life, are characteristic of the times, and tend to elucidate the subject of the present enquiry; as that at Stratford, near Bow in Middlesex, was a school for girls, wherein the French language, but very different from that of Paris was taught, and that at meals, not to wet the fingers deep in the sauce was one sign of a polite female education. And here it may not be improper to remark that before the time of king James the First, a fork was an implement unknown in this country. Tom Coriate the traveller learned the use of it in Italy, and one which he brought with him from thence was here esteemed a great curiosity.§ But to return to Chaucer: al-

* Of the several instruments above-mentioned it seems that the harp was the most esteemed. It is well known that king Alfred himself played on the harp: and we are told by Walter Hemingford in his Chronicle, published by Dr. Thomas Gale, in the Hist. Brit. et Ang. otherwise called the XV. Scriptores, vol. III. p. 591, that Edward I. while he was prince of Wales, and in the Holy Land, was attended by a Citharedus or harper; and it is probable that he had contracted a love for this instrument in some of those expeditions into Wales, which he undertook in the life-time of his father Hen. III. The same author relates that it was this harper that killed the assassin who stabbed Edward with a poisoned knife at Ptolemais. The manner of it is thus described by him:—'After the prince had received the wound he wrested the knife from the assassin, and ran it into his belly: his servant [the harper] alarmed by the noise of the struggle, rushed into the room, and with a stool beat out his brains.' See also Fuller's Hist. of the Holy War, book IV. chap. 29.

† From CITHOLE, above explained.

‡ WAYGHTES or WAITS, are Hautbois. Butler, Principles of Music, pag. 93. It is remarkable of this noun that it has no singular number; for we never say a Wait, or the Wait, but the Waits. In the Etymologium of Junius the word is used to signify the players on these instruments, and is thus explained:—'WAITS, lyricines, tibicines, citharedi, f. à verb, to wait, quia sc. magistratus et alios in pompis instat stipendium, sequatur, vel à G. gnet, vigilia, guetter, quia noctu excubias agunt quæ eandem agnoscunt originem sc nostrum watch, vigilie.' Skin.

§ 'Here I will mention a thing that might have been spoken of before in discourse of the first Italian towns. I observed a custom in all these Italian cities and towns through the which I passed, that is not used in any other country that I saw in my travels, neither do I think that any other nation of Christendome doth use it, but only Italy.

though forbidden by the canon law to the clergy, it appears from him that the monks were lovers of hunting, and kept greyhounds—that serjeants at law, were as early as the time of Edward the Third, occasionally judges of assize, and that the most eminent of them were industrious in collecting Doomes, i. e. judicial determinations, which by the way did not receive the appellation of Reports till the time of Flowden, who flourished in the reign of Elizabeth, before which persons were employed at the expense of our kings to attend the courts at Westminster, and take short notes of their decisions for the use of the public: a series of these is now extant, and known to the profession of the law by the name of Year-books—that the houses of country gentlemen abounded with the choicest viands—that a haberdasher, a carpenter, a weaver, a dyer, and a maker of tapestry, were in the rank of such citizens as hoped to become aldermen of London; and that their wives claimed to be called Madam—That cooks were great cheats, and would dress the same meat more than once—That the masters of ships were pirates, and made but little conscience of stealing wine out of the vessels of their chapmen when the latter were asleep—That physicians made astrology a part of their study—That the weaving of woollen cloth was a very profitable trade, and that the neighbourhood of Bath was one of the seats of that manufacture—That a pilgrimage to Rome, nay to Jerusalem, was not an extravagant undertaking for the wife of a weaver—That the mercenary sort of clergy were accustomed to flock to London, in order to procure chauntries in the cathedral of St. Paul—That at the Temple the members were not more than thirty,** twelve of whom

'The Italian, and also most strangers that are commorant in Italy, doe always at their meales use a little forke when they cut their meate. For while with their knife, which they hold in one hand, they cut the meate out of the dish, they fasten their forke, which they hold in their other hand, upon the same dish, so that whatsoever he be that sitting in the company of any others at meale, should unadvisedly touch the dish of meate with his fingers from which all at the table doe cut, he will give occasion of offence unto the company, as having transgressed the lawes of good manners, insomuch that for his error he shall be at the least brow-beaten, if not reprehended in wordes. This forme of feeding I understand is generally used in all places of Italy, their forks being for the most part made of yron or Steele, and some of silver, but those are used only by gentlemen. The reason of this their curiosity is, because the Italian cannot by any means indure to have his dish touched with fingers, seeing all mens fingers are not alike cleane. Hereupon I my selfe thought good to imitate the Italian fashion by this forked cutting of meate, not only while I was in Italy, but also in Germany, and oftentimes in England since I came home; being once quipped for that frequent using of my forke by a certain learned gentleman, a familiar friend of mine, one M. Laurence Whitaker, who in his merry humour doubted not to call me at table Furcifer, only for using a forke at feeding, but for no other cause.' Coriate's Crudities, pag. 90.

‡ Pref. to 3d. Rep.

¶ Besides such clerks as held chauntries in the nature of benefices, there were others who were mere itinerants, wandering about the kingdom, and seeking employment by singing mass for the souls of the founders. Fuller says that the ordinary price for a mass sung by one of these clerks was four pence; but that if they dealt in the gross, it was forty marks for two thousand. Worthies in Essex, chap. 389.

** This account of the number of members in one of the principal inns of court must appear strange in comparison with the state of those seminaries at this time, unless we suppose, as perhaps we ought, that Chaucer means by the persons to whom the mangle is servant, Benchers, and not those of a less standing. In the reign of Henry the Sixth the students in each of the inns of court were computed at two hundred; and these bear but a small proportion to their numbers at this day. The reason given by Fortescue for the smallness of their number in his time is very curious, and is but one of a thousand facts which might be brought to prove the vast increase of wealth in this country. His words are these:—'In these greater innes there can no student be maintained for lesse expenses by the year then twenty markes, and if he have a servant to waite upon him, as most of them have, then so much the greater will his charges be. Now, by reason of this charges, the children onely of noblemen do study the lawes in those innes, for the

were qualified to be stewards to any peer of the realm—That their manciple was a rogue, and had cunning enough to cheat them all—That stewards grew rich by lending their lords their own money. The summoner, an officer whose duty it is to execute the process of the ecclesiastical court, is a character now grown obsolete; from that which Chaucer has given of one, we however learn that they were a sort of men who throve by the incontinence of the common people, that they affected to speak Latin, that is to say, to utter a few of those cant phrases which occur in the practice of the consistory, and other ecclesiastical courts; and that they would for a small fee suffer a good fellow to have his concubine for a twelvemonth. That they were of counsel with all the lewd women in the diocese, and made the vulgar believe that the pains of hell were not more to be feared than the curse of the archdeacon.*

These several particulars, extracted from the prologues to the Tales, exhibit, as far as they go, a lively and accurate representation of the manners of the people of England in Chaucer's time; but these are few in comparison with the facts and circumstances to the same purpose which are to be met with in the tales themselves; nor are the portraits of the principal agents in the tales, and which accidentally occur therein, less exact than those contained in the prologues. The scholar Nicholas, in the Miller's Tale, is an instance of this kind; for see how the poet has described him.

He represents him as young, amorous, and learned; not a member of any college, for there were but few at Oxford in Chaucer's time, but living 'at his friends finding and his rent,' and lodging in the house of a carpenter, an old man, who had a very young and beautiful wife. In the house of this man the scholar had a chamber, which he decked with sweet herbs; he is supposed to study astronomy, or rather astrology; his chamber is furnished with books great and small, among which is the *Almagist*, a treatise said to be written by Ptolemy; an *Asterlagour*, or *As-trolabe*, an instrument used for taking the altitude of the sun and stars. He has also a set of *Augrim Stones*,† a kind of pebbles at that time made use of

'poor and common sort of the people are not able to bear so great charges for the exhibition of their children. And marchant men can seldom find it in their hearts to hinder their merchandise with so great yearly expenses. And thus it falleth out that there is scant any man found within the realm skillful and cunning in the lawes, except he be a gentleman born, and come of a noble stock. Wherefore they more then any other kind of men have a special regard to their nobility, and to the preservation of their honor and fame. And, to speak uprightly, there is in these greater innes, yea, and in the lesser too, beside the study of the law, as it were an university or school of all commendable qualities requisite for noblemen. There they learn to sing, and to exercise themselves in all kinde of harmony. There also they practice dauncing, and other noblemen's pastimes, as they use to do, which are brought up in the king's house. On the working dayes most of them apply themselves to the study of the law; and on the holie daies to the study of holy scripture; and out of the time of divine service to the reading of chronicles. For there indeed are virtues studied, and vices exiled; so that, for the endowment of vertue, and abandoning of vice, knights and barons, with other states, and noblemen of the realm, place their children in those innes, though they desire not to have them learned in the lawes, nor to live by the practice thereof, but onely upon their father's allowance.' *De Laudibus Legum Anglie*, cap. 49. Mulcaster's Translation.

* Some of these Prologues, modernized, as it is said, by Mr. Betterton, are printed in the *Miscellany* of Mr. Pope, in two volumes 12mo. Mr. Fenton, suspecting that they were indeed Pope's, requested of him the sight of Betterton's manuscript, but could never obtain it.

† *Augrim* is supposed by Mr. Urry to be a corruption of *Algorithm*, by which he says is meant the sum of the principal rules of common arith-

in numeral computation, and to which counters afterwards succeeded, and above all lay his musical instrument.

His rival Absolon, the parish clerk, is of another cast, a spruce fellow, that sung, danced, and played on the Fiddle; that was great with all the tapsters and brew-house girls in the town, and 'visited them with his solace.' His ingenuity and learning qualified him to let blood, clip hair, shave, and make a charter of land, or an acquittance. His employment in the church obliged him to assist the parish priest in the performance of divine service; and it appears to have been his duty on holidays to go round the church with a censor in his hand, conformable to the practice of the times, 'censing the wives of the parish.' But nothing can be more picturesque than the description of his person and dress. His hair shone like gold, and strutted broad like a fan; his complexion red, and his eyes grey as a goose; and the upper leathers of his shoes were carved to resemble the windows of St. Paul's cathedral; his stockings were red, and his kirtle or upper coat of light watchet, that is to say sky-colour, not tied here and there, merely to keep it close, but thick set with points,‡ more for ornament than use; all which gay habiliments were covered with a white surplice.

The Reve's Tale contains the characters of Denyse Simkin, the proud miller of Trompington, and his prouder wife: from the poet's description of them it appears that the husband, as a fashion not inconsistent

metic. Glossary to Chaucer. Gower's definition of the science of arithmetic seems to favour this opinion:—

Of arithmetick the matere

Is that of whiche a man may lere,

What Algorisme in nombre amounteth

Whan that the wise man accounteth

After the forme propretee

Of Algorismes a, b, c;

By which multiplicacion

Is made, and the diminucion

Of foomes, by the experience

Of this arte, and of this science.

Confessio Amantis, fol. 141. b.

But in a book entitled *Arithmetick*, or the *Ground of Arts*, written by Robert Record, doctor in physic, and dedicated to king Edw. VI., afterwards augmented by the famous Dr. John Dee, and republished in 1590 and 1648, 8vo., the word, as also another of the same signification, viz., *Arismetrick*, is thus explained:—'Both names are corruptly written, *Arismetrick* for *Arithmetick*, as the Greeks call it, and *Augrime* for *Algorisme*, as the Arabians sound it, which doth betoken the science of 'numbering.' Pag. 8. *Augrim stones* seem to have been the origin of counters, the use whereof in numerical calculation was continued down to the time of publishing the above book, for the author, pag. 9, says 'the art of arithmetic may be wrought diversely with pen or with counters: the powers of these counters were determined by their situation in the higher or lower of six rows or lines; but in this respect there was a difference, the merchants observing one rule, and the auditors of public accounts another.'

‡ Points were anciently a necessary article in the dress, at least of men; in the ancient comedies and other old books we meet with frequent mention of them; to describe them exactly, they were bits of string about eight inches in length, consisting of three strands of cotton yarn, of various colours, twisted together, and tagged at both ends with bits of tin plate; their use was to tie together the garments worn on different parts of the body, particularly the breeches or hose, as they were called, hence the phrase 'to untruss a point.' With the leather doublet or jerkin buttons were introduced, and these in process of time rendered points useless; nevertheless they continued to be made till of very late years, and that for a particular purpose. On Ascension-day it is the custom of the inhabitants of parishes with their officers to perambulate in order to perpetuate the memory of their boundaries, and to impress the remembrance thereof on the minds of young persons, especially boys; to invite boys therefore to attend this business, some little gratuities were found necessary, accordingly it was the custom at the commencement of the procession to distribute to each a willow wand, and at the end thereof a handful of the points above spoken of; which were looked on by them as honorary rewards long after they ceased to be useful, and were called tags.

with his vocation, wore both a sword and a dagger. As to his wife, she is said to have been the daughter of the parson of the town, who on her marriage gave her 'full many a pan of brass;' and because of her birth and her education, for she is said to have been 'fostered in a nunnery,' she was insolent to her neighbours, and assumed the style of Madam. The business which drew the scholars John and Alein to the mill of Simkin, bespeaks the difference which a long succession of years has made in a college life; for the rents of college estates were formerly paid, not in money, but in corn, which it was the business of the manciple to get ground and made into bread. During the sickness of the manciple of Soller's hall at Cambridge, two scholars, with a sack of corn laid on the back of a horse, armed each with a sword and buckler, set out for the mill at Trompington, a neighbouring village. The miller contrives to steal their corn, and the scholars take ample vengeance on him.

From the several passages above-cited and referred to, a judgment may be formed, and that with some degree of exactness, of the manners of the common people of this country; those of the higher orders of men are to be sought for elsewhere. Persons acquainted with the ancient constitution of England, need not be told that it was originally calculated as well for conquest as defence; and that before the introduction of trade and manufactures, every subject was a soldier: this, and the want of that intercourse between the inhabitants of one part of the kingdom and another, which nothing but an improved state of civilization can promote, rendered the common people a terror to each other: and as to the barons, the ancient and true nobility, it might in the strictest sense of a well known maxim in law, be said that the house of each was his castle. The many romances and books of chivalry extant in the world, although abounding in absurdities, contain a very true representation of civil life throughout Europe; and the Forest, the Castle, the Moat, and the Drawbridge, if not the Dungeon,* had their existence long before they became the subjects of poetical description.

It is true the pomp and splendour of the ancient nobility appeared to greater advantage than it would have done, had not the condition of the common people been such as to put it out of the power of any of their own order to rival their superiors; but to the immense possessions of the latter such power was annexed, as must seem tremendous to one who judges of the English constitution by the appearance which it wears at this day. To be short, all the lands in this kingdom were holden either mediately or immediately of the crown, by services strictly military. The king had the power of calling forth his barons, and they their tenants, and these latter their dependents also, to battle; and to levy on them money

* When the servants of great families were formerly much more numerous than now, some place of confinement for such as were unruly seems to have been necessary: and it is an indisputable fact that anciently in the houses of the principal nobility, putting them in the stocks was the punishment for drunkenness, insolence, and other offences: the knowledge of this practice will account for the treatment of Kent in king Lear, who by the command of Cornwall is set in the stocks. Within the memory of some persons now living the stocks were used for the above purpose at Slon house, near Isleworth, in Middlesex.

and other requisites for the carrying on either offensive or defensive war. At this time we see but little of those pecuniary emoluments arising from the relation between the lord and his tenant, which were then the principal sources of splendour and magnificence in the nobility, and men of large estates; or, in other words, it seems that anciently personal service was accepted in lieu of rent. But here the power and influence attendant on the feudal system breaks forth; the lord was entitled to the wardship of the heir of his freehold tenant under the age of twenty-one, and to the profits of all his estates without account. Nor was this all, he had the power of marrying his ward to whom he pleased; and where the inheritance descended to daughters, the marrying of them to any person above the degree of a villain, was as much the right of the lord as his castle or mansion; and had it been the fate of the four beautiful daughters of the great duke of Marlborough to have lived before the making the statute of king Charles the Second for abolishing tenures in capite, and to have survived their father, being under age, not one of them could have been married without the licence of the king, or perhaps his minister.

A system of civil policy, like that above described could not fail to influence the minds of the people; and in consequence of that jealousy which it had a tendency to excite, they lived in a state of hostility: a dispute about boundaries, the right of hunting, or pursuing beasts of chase, would frequently beget a quarrel, in which whole families, with all their dependants immediately became parties; and the thirst of revenge descended from father to son, so as to seem attached to the inheritance. Many of the old songs and ballads now extant are histories of the wars of contending families; the song of the battle of Otterburn, and the old ballad of Chevy-Chace, with many others in Dr. Percy's collection, are instances of this kind, and were these wanting, a curious history of the Gwedir family, lately published by the learned and ingenious Mr. Barrington, would sufficiently show what a deadly enmity prevailed in those barbarous times among the great men of this kingdom.

It has already been hinted that under the ancient constitution the generality of women lived in a state of bondage; and how near that state approaches to bondage, in which a woman is denied the liberty of choosing the man she likes for a husband, every one is able to see; most of the laws made to preserve their persons from violence were the effects of modern refinement, and sprang from that courtesy which attended the knightly exercise of Arms, concerning the origin of which, as it contributed to attenuate the almost natural ferocity of the people, and reflect a lustre on the female character, it may not be improper here to enquire.

CHAP. XLVII.

WHETHER chivalry had its rise from those frequent expeditions for the recovery of the Holy Land, which

authors mean when they speak of the crusades, or whether crusading was the offspring of chivalry, is a matter of controversy; but whatever be the fact, it is certain that for some time they had a mutual dependence on each other; the military orders of religious were instituted for the sole purposes of guarding the holy sepulchre, and protecting the persons of pilgrims to Jerusalem from violence. During the continuance of the Holy War, as it was called, and for some centuries after, incredible numbers of persons of all conditions flocked from every part of Europe to Jerusalem on pilgrimage; and supposing these vast troops to include, as in fact they did, the sons and daughters of the principal families, it might be truly said that the flower of all Europe were at the mercy not only of the enemies of the Christian faith, but of pirates and land-robbers. Injuries offered to the persons of beautiful and distressed damsels in those perillous expeditions, called forth the resentment of their brave countrymen or fellow Christians, and induced great numbers of young men to engage in their defence, and, well mounted and completely armed, to ride forth in search of adventures. To what length some were hurried by their attention to these calls of humanity, we may in some measure learn from that vast profusion of fabulous compositions, the romances of the eleventh and succeeding centuries, which, though abounding with incredible relations, had their foundation in the manners of the times in which they were written.*

* It is observable that the ancient romances abound with particular descriptions of the shields, devices, and impressions of the combatants at tilts and tournaments; and it is notorious that throughout Europe families are distinguished by what is called their coat armour. The heralds, for the honour of their profession, contend that this method of distinction had its origin in that assignment of a certain badge or cognisance, which Jacob, Genesis, chap. xlix. seems to make to his twelve sons, when he resembles Judah to a lion's whelp, and says Zabuion shall be a haven for ships, Issachar an ass, Dan a serpent, &c. Dame Juliana Barnes, who wrote the book of St. Alban's, asserts that Japhet bore arms, and therefore styles him gentlemanly Japhet. But in fact the practice is not to be traced farther back than to the time of the crusades. Sir William Dugdale gave Mr. Siderfin, a barrister of the Inner Temple in the time of Charles the Second, and the collector of the Reports which bear his name, the following account of the origin of coat armour, viz., 'When Richard I. with a great number of his subjects, made a voyage to Jerusalem in order to recover it from the Turks, the commanders in that expedition distinguished themselves by certain devices depicted on their shields; but this invention not being found sufficient to answer the end, they made use of silk coats, with their devices or arms painted on the back and breast, which silk coats were worn over the armour, and from these came the coat which the heralds now wear, and hence the term Coat of Arms; and from this time, nothing interposing to prevent it, arms became hereditary, descending to all the sons, in the nature of Gavelkind.' Vide 1 Inst. 140. From whence by the way it should seem that women are not entitled to the distinction of coat armour, though it is the practice of the heralds to blazon arms for unmarried ladies in a lozenge.

The origin of Supporters is thus accounted for: when the exercises of tilts and tournaments were in use, it was the practice of princes by proclamation to invite, upon particular solemnities, knights, and other persons of martial dispositions, from all parts of Christendom, to make proof of their skill and courage in those conflicts; for which purpose a plain was usually chosen, lists marked out, and barriers erected. Within the lists were pitched the tents of the combatants, and some time before the exercises began, shields were severally placed at the doors of their tents, with their arms and other devices depicted thereon; and as these attracted the eyes of the spectators to view and contemplate them, it was thought an addition to the pomp and splendour of the ceremony that the shields should be supported, and the 'squires or pages of the knights were thought the properest persons for this employment. Fancy, which was ever at work upon these occasions, suggested the thought of dressing these persons in emblematical garbs, suited to the circumstances of those whom they attended. Some of these supporters were made to represent savages, or green Men, seemingly naked, but with green leaves on their heads, and about their loins; some appearing like saracens, with looks that threatened destruction to their beholders; others were habited like palmers or pilgrims, and some were angels. A little stretch of invention led them to assume the figure of Monks, griffins, and a world of other forms, and hence the use of supporters became common.

Here it may be observed that the bad success of the holy war had ren-

Particular instances of that knightly bravery which chivalry inspired, are not now to be expected, and we have no other evidence than the testimony of the sage writers of romance to induce a belief that Giants were the owners of Castles, that Dwarfs were their porters, or that they kept beautiful damsels imprisoned in their dungeons: nevertheless it is certain that the exercise of arms had a tendency to excite a kind of emulation in the brave and youthful, which was productive of good consequences, for it gave rise to that quality which we term Courtesy, and is but a particular modification of humanity; it inspired sentiments of honour and generosity, and taught the candidates for the favour of ladies to recommend themselves by the knightly virtues of courage and constancy.

Milton has in a few words described those offsprings of chivalry, tilts and tournaments, in the following lines:—

Where throngs of knights and barons bold
In weeds of peace high triumphs hold,
With store of ladies, whose bright eyes
Rain influence, and judge the prize
Of wit, or arms, while both contend
To win her grace, whom all commend.

L'ALLEGRO.

From the institution of exercises of this and the like kind, and from the sentiments which they are calculated to inspire, is to be dated the introduction of women on the theatre of life, and the assigning to them those parts which nature has enabled them to act with propriety: and from this time they are to be considered as parties in the common and innocent amusements of life, present at public festivities, and joining in the social and domestic recreations of music and dancing.

These indulgences it must be confessed were the prerogative of ladies, and could not in their nature extend to the lower rank of women: the refinement of the times left these latter in much the same state as it found them: household economy, and an attention to the means of thriving, were the distinguishing characteristics of the wives and daughters of farmers, mechanics, and others of that class of life. In a poem intitled the Northern Mother's Blessing to her Daughter, written, as it is said, nine years before the death of Chaucer, which contains a curious representation of the manners of the common people, are a great number of excellent precepts for forming the character of a good housewife, among which are the following:—

My daughter gif thou be a wife, wisely thou werke,
Looke euer thou loue God and the holy kirke,
Go to kirke when thou may, and let for no rayne,
And then shall thou fare the bet, when thou God has sayn:
Fyll well may they thrive
That seruen God in their liue,
My leue dere child.

dered the name of a saracen a terror to all Christendom, and the sign of the saracen's head one of the most common for ins of any in England, is a picture of a giant with great whiskers, and eyes glowing with fire, in short, he is represented in the act of blaspheming. The reason of this may be collected from the following curious anecdote, perhaps first communicated to writing by Mr. Selden:—'When our countrymen came home from fighting with the saracens, and were beaten by them, they pictured them with huge big terrible faces (as you still see the sign of the saracen's head is), when in truth they were like other men. But this they did to save their own credits.' Table-talk, Tit. War.

When thou fitts in the kirke thy bedes shalt thou bid ;
Therein make no ianglin with friend ne fib.
Laugh not to scorne nodir old ne young,
Be of good bering, and haue a good tongue ;

For after thy bering
So shall thy name spring,
My, &c.

Gif any man with worship desire to wed thee,
Wifely him anfwere, scorne him not what he bee,
And tell it to thy friends, and hide thou it nought ;
Sit not by him, nor stand not that fin mow be wrought.

For gif a flaunder be once rayfed,
It is not so fone filled,
My, &c.

What man that shall wed the fore God with a ring,
Looke thou loue him best of any earthly thing ;
And meekly him anfwere, and not too snatching,
So may thou flake his yre and be his darling :

Faire words flaken yre,
Suffer and haue thy desire.
My, &c.

When thou goes by the gate, go not too fast ;
Ne bridle not with thy hede, ne thy shoulers cast,
Be not of many words, ne sweare not to gret,
All euill vices my doughter thou foryet ;

For gif thou haue an euill name,
It will turne the to grame,*
My, &c.

Goe not oft to the towne as it were a gaze,
Fro one houle to odir for to seeke the mase,
Ne go not to market, thy barrell to fill ;
Ne use not the tauerne thy worship to spill :

For who the tauerne uses,
His thrift he refuses,
My, &c.

Gif thou be in place where good drink is on loft,
Wheder that thou serue, or thou sit softe ;
Mefurely take thou, and get the no blame ;
Gif thou be drunken it turnes the to shame.

Who so loues meafure and skill,
He shall ofte haue his will,
My, &c.

Go not to the wrastling, ne shoting the cock,
As it were a strumpet or a giglot.†
Be at home doughter, and thy things tend,
For thine owne profit at the latter end.

Mery is owne thing to see,
My dere doughter I tell it thee,
My, &c.

Hufewifely shall thou go on the werk-day :
Pride, rest, and idleness, put hem cleane away.
And after on the holy day well clad shalt thou be :
The haliday to worship, God will loue thee

More for worship of our Lord,
Than for pride of the world,
My, &c.

Look to thy meynny, and let them not be ydell :
Thy husband out, looke who does much or litell,
And he that does well quite him his meede ;
And gif he doe amiffe amend thou him bidde,
And gif the work be great, and the time strait,

Set to thy hond, and make a hufwife's brayd,
For they will do better gif thou by them stond :
The worke is soner done, there as is mony hond,
My, &c.

And looke what thy men doon, and about hem wend.
At euery deede done be at the tone end :
And gif thou finde any fault, soone it amend ;
Eft will they do the better and thou be neare hand.

Mikell him behoues to doe,
A good houle that will looke to,
My, &c.

Looke all thing be well when they worke leaden,
And take thy keyes to the when it is euen ;
Looke all thing be well, and let for no shame,
And gif thou so do thou gets thee the lasi blame ;

Trust no man bett thyselfe,
Whilest thou art in thy helth.
My, &c.

Sit not at euen too long at gaze with the cup
For to wassell and drinke all uppe ;
So to bed betimes, at morne rise belue,
And so may thou better learne to thriue ;

He that woll a good houle keepe
Must ofte-times breake a sleepe,
My, &c.

Gif it betide doughter thy friend fro the fall,
And God send the children that for bread will call,
And thou haue mickle neede, helpe little or none,
Thou must then care and spare hard as the stone,

For euill that may betide,
A man before should dread,
My, &c.

Take heede to thy children which thou hast borne
And wait wel to thy doughters that they be not forlone ;
And put hem betime to their mariage,
And giue them of thy good when they be of age,

For maydens bene louely,
But they ben untrusty,
My, &c.

Gif thou loue thy children hold thou hem lowe,
And gif any of hem misdo, banne hem not ne blow,
But take a good smart rod, and beat hem arowe,
Till they cry mercy, and their gilts bee know,

For gif thou loue thy children wele,
Spare not the yard neuer a deale,
My, &c.‡

The foregoing stanzas exhibit a very lively picture of the manners of this country, so far as respects the conduct and behaviour of a class of people, who at the time when they were written, occupied a station some degrees removed above the lowest ; and seem to presuppose that women of this rank stood in need of admonitions against incontinence and drunkenness, vices at this day not imputable to the wives of farmers or tradesmen. It is much to be lamented that the means of recovering the characteristics of past ages are so few, as every one must find who undertakes to delineate them. The chronicles and history of this country, like those of most others, are in general the annals of public events ; and a history of local manners is wanting in every country that has made the least progress towards a state of civilization. One of the best of those very few good sentiments contained in the writings of the late lord Bolingbroke is this, 'History is philosophy teaching by example.' And men would be less at a loss than they are how to act in many situations, could it be known what conduct had heretofore been pursued in similar instances. Mankind are possessed with a sort of curiosity, which leads them to a retrospect on past times, and men of speculative natures are not content to know that a nation has subsisted for ages under a regular form of government, and a system of laws calculated to promote virtue and restrain vice, but they wish for that intelligence which would enable

‡ The poem from which the above stanzas are taken was printed, together with the stately tragedy of Guilstar and Simond, and a short copy of verses entitled 'The Way to Thrift,' by Robert Robinson, for Robert Dexter, in 1597 ; and in the title-page all the three are said to be 'of great antiquitie, and to have been long reserved in manuscript in the studie of a Northfolke gentleman.'

* GRAMM, sorrow, vexation, Gram, furor. URBY.

† GIGLOT, lascivus, petulans, libidinosus, venereus. JUNIUS.

them to represent to their minds the images of past transactions with the same degree of exactness as is required in painting. With what view but this are collections formed of antiquities, of various kinds of medals, of marbles, inscriptions, delineations of ancient structures, even in a state of ruin, warlike instruments, furniture, and domestic utensils. Why are these so eagerly sought after but to supply that defect which history in general labours under?

Some of our English writers seem to have been sensible of the usefulness of this kind of information, and have gratified the curiosity of their readers by descending to such particulars as the garb, and the recreations of the people of this country. In the description of the island of Britain, borrowed, as it is supposed, from Leland, by William Harrison, and prefixed to Hollinshed's Chronicle, is a very entertaining account of the ancient manner of living in England. Stowe is very particular with respect to London, and spends a whole chapter in describing their sports and pastimes. Hall, in his Chronicle, has gone so far as to describe the habits of both sexes worn at several periods in this country. Some few particulars relating to the manners of the English, according to their several classes, are contained in that curious little book of Sir Thomas Smith, *De Republica Anglorum*; others are to be met with in the *Intinerary of Fynes Moryson*, and others to the last degree entertaining in that part of the *Intinerary of Paul Hentzner*, published by the honourable Mr. Walpole in 1757, with the title of a *Journey into England* in 1589.

These it is presumed are the books from which a curious enquirer into the customs and manners of our forefathers would hope for information; but there is extant another, which though a great deal is contained in it, few have been tempted to look into; it is that entitled *De Proprietatibus Rerum*, of Bartholomæus, written originally in Latin, and translated into English by John Trevisa, in the year 1398. Of the author and translator the following is an account:—

The author Bartholomæus, surnamed Glanville, was a Franciscan friar, and descended of the noble family of the earls of Suffolk. The book, *De Proprietatibus Rerum*, was written about the year 1366. Trevisa was vicar of the parish of Berkeley, in the year 1398, and favoured by the then Earl of Berkeley, as appears by the following note at the end of this his translation, which fixes also the time of making it.*

‘Endleſs grace, blyſſe, thankyng, and prayſyng unto
‘our Lorde God omnipotent be giuen, by whoos ayde
‘and helpe this tranſlacyon was ended at Berkeleye
‘the fyfte daye of Feurer, the yere of our Lord
‘M.ccc.lxxxviii. the yere of the reyne of kynge
‘Rycharde the ſeconde, after the conqueſte of Englonde
‘xxii. The yere of my lordes aegre fyre Thomas lorde of
‘Berkeleye that made me to make this tranſlacyon xlvii.’

It seems that the book in the original Latin was printed at Haerlem in 1485; but as to the translation, it remained extant in written copies till the time of

Caxton, who first printed it in English, as appears by the Proem of a subsequent impression of it by Wynken de Worde, some time before the year 1500.

It was again printed in 1535 by Thomas Berthelet; and in 1582, one Stephen Batman, a professor of divinity, as he styles himself, published it with the title of *Batman upon Bartholome his booke De Proprietatibus Rerum*, with additions. Like many other compilations of those early times, it is of a very miscellaneous nature, and seems to contain the whole of the author's reading on the subjects of theology, ethics, natural history, medicine, astronomy, geography, and other mathematical sciences. What renders it worthy of notice in this place is, that almost the whole of the last book is on the subject of music, and contains, besides a brief treatise on the science, an account of the instruments in use at the time when it was written. This treatise is the more to be valued, as it is indisputably the most ancient of any yet published in the English language on the subject of music, for which reason the whole of it is inserted verbatim in a subsequent part of this work.

The sixth book contains twenty-seven chapters, among which are these with the following titles: *De Puero*, *De Puella*, *De Ancilla*, *De Viro*, *De Patre*, *De Servis*, *De Proprietatibus Servi mali*, *De Proprietatibus boni Servi*, *De Bono Domino*; these several chapters furnish the characteristics of childhood, youth, and mature age, at the time when this author wrote. And though it is true that this sixth book has little to do with music, and the mention of songs and carols does but occasionally occur in it; nevertheless the style of this author is, in respect to his antiquity, so venerable, his arrangement of the different classes of life so just, and the picture exhibited by him of ancient manners in this country so lively, and to all appearance true, that a short digression from the purposed work to that of Bartholomeus, will carry its own apology to every inquisitive and curious observer of human life and manners.

Of children he says, that when a child has passed the age of seven years, he is ‘fette to lernynge, and ‘compellid to take lernynge and chaſtyfyng.’† At

† In the infancy of literature the correction of children, in order to make them diligent and obedient, seems to have been carried to great excess in this and other countries; in the poem above-cited, the daughter is exhorted in the education of her children ‘not to be sparing of the ‘yard,’ &c., not to refrain from beating them with a stick with which cloth is measured; and it is probably owing to Mr. Locke's *Treatise on Education* that a milder and more rational method of institution prevails at this day: it seems as if men thought that no proficiency could be made in learning without stripes. When Heloise was committed to the tuition of Abelard, he was invested by her uncle with the power of correcting her, though she was then twenty-two years of age. The lady Jane Gray complained very feelingly to Ascham of the pinches, nippes, and bobbes, and other nameless severities which she underwent from her parents in order to quicken her diligence in learning. See a letter of Robert Ascham to his friend Sturmius, in the *Epiſtles* of the former, and the *Scholemaſter of Ascham*. Tusser, the author of the *Five hundred Points of Husbandry*, speaks of his ‘toosed ears and bobbed lips,’ and other hardships which he sustained in the course of his education; and mentions with a kind of horror the severity of Udall, the master of Eton school, who gave him at once fifty-three stripes for that which was either none, or at most a very small fault. The cruelty of this man elsewhere appears to have been so great as to afford a reason to many of the boys for running away from the school, as is related by Ascham in his *Scholemaſter*. Even so late as the reign of Charles II. the correction of a young gentleman in the course of his exercises was very common, as appears from the caution which the duke of Newcastle gives to the teachers of the art of horsemanship, not to ‘revile their ‘pupils with harsh language, nor to throw stones at them,’ which, says he ‘many masters do, and for that purpose carry them in their pockets.

* Vid. Tann. Biblioth. Brit. pag. 326. The same Trevisa translated also out of Latin into English the Bible, and the *Polychronicon* of Ranalph Higden. Ibid. pag. 720.

that age he says they are 'plyaunt of body, able and lyghte to mocuyng, wytty to lerne carolles, and wythoute besynesse, and drede noo perylles more thane betyng with a rodde; and they loue an apple more than golde.' Farther that they 'loue playes, game, and vanytee, and forsake worthynes; and of contrarite, for mooft worthy they repute leest worthy, other not worthy, and desire thynges that is to theym contrary and greuouse; and sette more of the ymage of a chylde than of thymage of a man; and make sorrowe and woo, and wepe more for the losse of an apple than for the losse of theyr heritage; and the goodnesse that is done for theym they lete it passe out of mynde. They desire all thynges that they fe, and praye and aske wyth voyce and wyth honde. They loue talkyng and counseyll of such children as they ben, and voyde company of olde men. They kepe no counseyll, but they telle all that they here: sodenly they laugh, and sodenly they wepe: alwaye they crye, jangle, and jape, uneth they ben styll whyle they slepe. When they ben wasse of fylthe, anone they defoyle themselfe ayen; whan the moder wasshith and kometh them they kick and spraul, and put wyth fete and wyth hondes, and wythstondyth wyth al theyr myghte, for they thynke onnly on wombe-joy, and knowe not the mesure of their wombes: they desire to drynke alwaye uneth they are oute of bedde, whan they crie for mete an oue.

In the sixth chapter a damsel is thus described:—

[*De Puella.*] 'A mayde, chylde, and a damoyfel is callyd *Puella*, as it were Clene and Pure as the blacke of the eye. Amonge all thynges that ben louyd in a mayden, chaftyte and clenness ben louyd most. Men byhoue to take hede of maydens, for they ben hote and moyste of complexyon, and tendre, smale, plyaunt, and fayr of disposycyon of body. Shamfalte, ferdefull, and mery, touchyng with affectyon, delycate in clothynge, for, as *Seneca* sayth, that femely clothynge bytemyth to them well that ben chaste damoyfels. *Puella* is a name of aegre of foundnes wythout wem, and also of honeste. And for a woman is more meker than a man, and more enuyous, and more laughynge and louynge, and males* of foule is more in a woman than in a man; and she is of feble kynde, and she makyth more lesynges, and is more shamefast, and more slowe in werkyng, and in meuyng, than is a man.

[*De Ancilla.*] 'A seruant-woman is ordeyned to lern the wyues rule as it is put to offyce, and werke of traueyle and of defoyle, and is sedde wyth grete mete and simple, and clothed in foule clothes, and kepte lowe under the yocke of thraldom and of seruage; and yf she conceyue a chylde, she is yeue in thralle, or it be born, and take from the moders wombe to seruage. Also yf a seruyng-woman be of bond condycyon she is not suffred to take an husbond at her owne wylle: and he that weddyth her, yf he be fre afore, he is made bonde after the contrakte. A bonde-seruaunte-woman is boutte and folde lyke a beest; and yf a bonde-seruaunt-man or woman is

'made fre, and afterwarde unkynde, he shall be callyd and brought ayen into charge of bondage and of thraldom. Also a bonde seruant suffrith many wronges, and is bete wyth rodde, and constreyned, and holde lowe wyth dyuerse and contrary charges and trauelles; amonges wretchydnes and woo, uneth he is suffred to reffe or to take brethe; and therefore amonge all wretchydnes and woo the condycyon or bondage and thraldom is moft wretchid. It is oo properte of bonde-seruyng-wymmen, and of them that ben of bonde condycyon, to grutche and to be rebell and unbuxom to theyr lordes and ladies. And whan they ben not holde lowe wyth drede, their hertes swelle, and wer stoute and proude ayenst the commaundmentes of their soueraynes, as it farid of *Agar*, a woman of Egypt, seruauit of *Saira*, for the fawe that she had conceyued, and was wyth chylde, and dyspleysed her owne lady, and wolde not amende her; but then her lady putte her to be scourged, and bete her, and soo it is writ that *Saira* chaftyed her and bete her, &c. Pryde makyth bonde-men and wymmeme meke and lowe: and goodly loue makyth theim prowde, and stoute, and dyspiteous; and so it is sayd there it is wrytte, he that nouryssheth his seruant delycatly, he shall fynde hym rebell at thende.

[*De Viro.*] 'A man is callyd *Vir* in Latyn, and hath that name of mighte and uertue, and strengthe, for in myghte, and in strengthe a man passyth a woman. A man is the hede of a woman, as the Appostle sayth, therefore a man is bounde to rule his wife, as the heed hath cure and rule of the body. And a man is callyd *Maritus*, as it were wardynge and defendyng the moder, for he taketh warde and keypyng of his wyfe, that is moder of the chylde, and is callyd *Sponsus* also, and hath that name of *Sponded*, for he byhottyth and oblygith himself; for in the contrakte of weddinge he plighteth his trouthe to lede his lyfe wyth hys wyfe, wythout departyng, and to paye her dettes, and to kepe and loue her afore all other. A man hath soo grete loue to his wyfe, that because hereof he auenthyr hymself to perylles, and settyth her loue afore his moders loue: for he dwellyth with his wyfe, and forsakyth his moder and his fader, for soo sayth God, a man shall forsake fader and moder, and abyde wyth his wyfe.

Afore weddinge the spouse thynkyth to wynne the loue of her that he wowyth, with yefte, and certefyeth of his wyll wyth lettres and messengers, and wyth diuerse presents, and yeuyeth many yestes and moche good and catayle, and promyseth moche more; and to playse her puttyth hym to diuerse playes and games amonge gadering of men; and use ofte dedes of armes of myght and of maystry; and makyth hym gay and femely in dyuerse clothynge and araye; and all that he is prayed to giue thereto for her loue he yeuyeth, and dooth anone with all his myght, and denyeth no peticyon that is made in her name, and for her loue. He spekyth to her pleyfauntly, and byholdeth her cheer in the face wyth pleyfsynge and glad cheer, and wyth a sharp eye, and assentyth to her at laste, and tellith openly his wyll in prefence of her frendes, and spousith her with a ryng, and takyth her to wyfe,

* Malice.

• and yeueth her yestes in token of contract of weddyng, and makyth her chartres and dedes of graunt, and of yestes; and makyth reuels, and festes, and spoufayles, and yeuyth many good yestes to frendes and giftes, and comfortyth and gladdith his giftes with songes and pypes, and other mynstralsye of musyke; and afterwarde he bringeth her to the pryutees of his chambre, and makyth her fellow at borde and at bedd; and thene he makyth her lady of money, and of his hous meyny. Thene he hath cause to her as his owne, and takyth the charge and keepyng of her, and specyally louyngly auyseth her yf she doe amys, and takyth of her berynge and gooyng, of spekyng and lokinge; of her passyng and ayencomyng, and entryng. Noo man hath more welth than he that hath a gode woman to his wyfe, and no man hath more woo than he that hath an euyll wyfe, cryenge and janglyng, chydnyng and skoldyng, dronklewe and unstedfaste, and contrary to hym: coklewe, flowte, and gaye, enuyous, noyful, lepyng ouer londes, moch suspycious, and wrathful.

‘In a good spoufe and wyfe byhoueth thife condycyons, that she be besye and deuote in Goddys seruyse; meke and servyseable to her husbonde, and fayre spekyng and goodly to her meyny; merycable and good to wretches that ben nedy, easy and peasfable to her neyghbours, ready waar and wise in thynges that shold be auoyed, ryghtfull and pacyent in sufryng, besy and dyligente in her doynge, manerly in clothyng, sobre in mouyng, waar in spekyng, chaste in lokinge, honeste in beryng, sadde in goyng, shamfaste amonge the people, mery and gladd amonge men wyth her husbonde, and chaste in pryute. Such a wyfe is worthy to be prayfed that entendyth more to pleyse her husbonde wyth her homely word, than with her gayly pinchyng and nycetees, and desyreth more with vertues than with fayr and gay clothes. She usyth the goodnes of matrimony more bycause of chyldren than of fleshy lykyng, and more lykyng in chyldren of grace than of kynde.’

BOOK VI. CHAP. XLVIII.

THE description given by Bartholomæus of the several states and conditions of life, refer to the relations of father, mother, son, daughter, and female servant, and the duties resulting from each, adapted to the manners of the fourteenth century, which, though comparatively rude and unpolished, were not so very coarse and sordid as not to admit of those recreations and amusements, which are common to all ages and countries, and are indeed as necessary for the preservation of mental as corporeal sanity, and among these are to be reckoned music and dancing.

Mention has already been made in general terms of those songs and ballads which were the entertainment of the common people; and examples of poetical compositions, suited to the mouths of the vulgar, will occur in their place.

These it may be said are very homely representations of ancient manners: it is true they are, but they are representatives of the manners of homely and uninstructed people, the better sort of both sexes entertaining formerly, as now, very different sentiments; and what respect and civilities were anciently thought due to women of rank and character, may be learned from the feigned conversations between knights and their ladies, with which the old romances abound. Nay, such was the respect paid to the chastity of women, that the church lent its aid to qualify men for its protection; and over and above the engagements which the law of arms required as the condition of knighthood, most of the candidates for that honour, that of the Bath in particular, were obliged to fast, to watch, to pray, and to receive the sacrament, to render them susceptible of it; and their investiture was attended with ceremonies which had their foundation in Gothic barbarism and Romish superstition. How long the idea of sanctity of life and manners continued to make a part of the knightly character, may be inferred from Caxton's recommend-

ation of his Boke of the Ordre of Chyvalry or Knighthood, translated out of French, and imprinted by him, wherein are these words:—‘O ye knights of England! where is the custom and usage of noble chyvalry that was used in thofe dayes? What do you now, but go to the baynes, [*batbs*,] and play at dyse? and some not well aduised, use not honest and good rule, agayn all order of knighthood. Leue this, leue it, and rede the noble volumes of Saynt Greal,* of Lancelot, of Galaad, of Trifram, of Perforest, of Percyual, of Gawayne, and many mo: There shall ye see manhode, curtoys, and gentlenes; and loke in

* The noble volume thus entitled is said to be no other than the romance of Sir Launcelot of the Lake, and King Arthur and his Knights. See the Supplement to the translator's preface to Jarvis's *Don Quixote*, where it is also said that St. Greal was the name given to a famous relic of the holy blood, pretended to have been collected into a vessel by Joseph of Arimathea, and that the ignorance of the times led men to the belief that it was the name of a knight. Huetius, in his *Treatise on the Origin of Romances*, says that Kyrie Eleison [Lord have mercy on us] and Parailipomenon [the title of the two books of Chronicles] and another eminent writer adds the word Deuteronomy, were in like manner taken for the names of saints or holy men. Other instances to this purpose might be produced, but this that follows of St. Veronica, a holy young woman said to have been possessed of a handkerchief with the impression of Christ's face on it, surpasses all of the kind. Misson, in his *Description of the Chapel of the Holy Handkerchief (Le Saint Suaire)* at Turin, giving an account of this inestimable relic, relates the story of it in these words:—‘It is a pretended veil, or handkerchief which was presented (says the tradition) to our Saviour as he was carrying the cross (according to St. John) by a maid named Veronica. They pretend that Jesus Christ wiped his face with it, and gave it back to her who had presented him with it; and that the face of Jesus Christ remained imprinted upon it with some colour. This is the holy handkerchief, Sudarium; and as for Veronica, the devout virgin, 'tis a pretty diverting stroke of ignorance: with these words Vera Icon, that is to say, a true image or representation (viz., of the face of Jesus Christ) those curious doctors have made Veronica, and afterwards they took a fancy that Veronica was the name of the pretended young woman supposed by themselves to have presented her handkerchief to our Saviour. The Sudarium was carried from Chambery in the year 1532, the chapel where it was at Chambery having been accidentally burnt. There are five or six more at Rome and other places. See Relatius de Imaginibus Christi, and *Bede de Locis sanctis*. Misson's new voyage to Italy, London, 1714, vol. II. part II. pag. 388. The famous story of the eleven thousand virgins is as void of foundation in historical truth as that above related. It arose thus: some blunderer seeing in a calendar upon the twelfth of the calends of November, *Undecimilla, Virgo & Martyr*, read *Undecim mille*; and of course *Virgines & Martyres*. Undecimilla, a diminutive of *Undecima*, was undoubtedly the name of a woman, probably the eleventh child of her parents, who might have been a martyr. Vide Pref. to Castley's Catalogue of the Manuscripts of the King's Library, pag. xvii.

'latter dayes of the noble actes fyth the conquette, as
'in king Richard's days, Cuer de Lion: Edward I. and
'III. and his noble sonnes: Sir Robert Knolles, &c.
'Rede, Froiffart. Also behold that victorious and
'noble king, Harry the Fifth, &c.'

But to reassume the proposed discrimination between the manners of the higher and lower orders of the people. It is certain that the courtesy and urbanity of the one was at least equal in degree to the rudeness and incivility of the other; for, not to recur to the compositions of the Provençal poets, Boccace himself is in his poetical compositions the standard of purity and elegance. He it is said was the inventor of the Ottava Rima, of which a modern writer asserts that it is the noblest concatenation of verses the Italians have; and the sonnets, and other poetical compositions interspersed throughout the Decameron, may serve to shew what a degree of refinement prevailed in the conversations of the better sort at that early period. If farther proofs were wanting, the whole of the compositions of Petrarch might be brought in support of this assertion. The sonnets of this elegant and polite lover are not more remarkable for their merit as poetical compositions, than for charity and purity of sentiment: and much of that esteem and respect with which women have long been treated, is owing to those elegant models of courtship contained in the addresses of Petrarch to his beloved Laura, which have been followed, not only by numberless of his own countrymen, but by some of the best poets of this nation, as namely, the earl of Surrey, Sir Thomas Wiat, Sir Edward Dyer, Vere, earl of Oxford, Spenser, Shakespeare, and others.

A few enquiries touching the recreation of dancing, will lead us back to the subject of this history, from which it is to be feared the foregoing disquisition may be thought a digression; and here it is to be observed, that even at the times now spoken of, dancing was the diversion of all ranks of people; though to ascertain the particular mode of this exercise, and how it differed from that now in use, is a matter of great difficulty. The art of Orchesography, or denoting the several steps and motions in dancing by characters, is a modern invention of a French master, Mons. Beauchamp, who lived in the time of Lewis XIV., though it has been improved and perfected by another, namely, Mons. Feuillet: * and of the several kinds of dance in fashion in the days of queen Elizabeth, we know little more than the names, such as the Galliard, the Pavan,† the Coranto, and some others. Sir Thomas Elyot, in his book called the Governor, says in general, that dancing by persons of both sexes is a mystical representation of matrimony,

* Furetiere, in his Dictionary, ascribes this invention to one Thoinet Arbeau, a Frenchman, mentioned by Walther in his Musical Lexicon, pag 43, to have published in 1558, a book with the title of Orchesographie. Furetiere confesses he never could get a sight of the book; but Mr. Weaver, the dancing-master, who had perused it, says that it treats on dancing in general, beating the drum, and playing on the fife; and contains nothing to the purpose of the Orchesography here spoken of. Feuillet's book was translated into English, and published by Mr. Weaver about the beginning of this century. Vide Weaver's Essay towards an History of Dancing, 13mo. pag. 171.

† See an explanation of these two words in the opposite note. The Coranto is of French original, and is well understood to mean a kind of dance resembling running.

these are his words: 'It is diligently to be noted that
'the company of man and woman in dancing, they
'both observing one number and time in their
'movings, was not begun without a special consider-
'ation, as well for the conjunction of those two per-
'sonnes, as for the imitation of sundry vertues which
'be by them represented.‡

'And forasmuch as by the joyning of a man and
'woman in dauncing may be signified matrimony,
'I could in declaring the dignitie and comoditie of
'that sacrament make intier volumes if it were not
'so commonly knowen to al men, that almost every
'frier lymytour caryeth it written in his bosome.§

And elsewhere he says, 'In every daunce of
'a most ancient custome there daunced together a man
'and a woman, holding each other by the hand or
'by the arme, which betokeneth concord. Now it
'behoveth the dauncers, and also the beholders of
'them, to know al qualities incident to a man, and
'also al qualities to a woman likewise appertaining.||

A little farther he speaks of a dance called the Braule, by which he would have his reader understand a kind of dancing, the motions and gesticulations whereof are calculated to express something like altercation between the parties: whether this term has any relation to that of the Bransle of Poitiers, which occurs in Morley's Introduction, may be a matter of some question: Minshew and Skinner derive it from the verb Bransler, Vibrare, to brandish; the former explains the word Braule, by saying it is a kind of dance. Phillips is more particular, calling it 'a kind of dance in which several persons
'danced together in a ring, holding one another by
'the hand.'

Over and above this particular specification of one of the old dances, Sir Thomas Elyot mentions some other kinds, as Bagenettes, Panyons, Turgyons,¶ and Roundes, concerning which he says, 'that as for
'the special names, they were taken as they be now,
'either of the names of the first inventours, or of
'the measure and number that they do containe; or
'of the first words of the dittie which the song
'comprehendeth, whereoff the daunce was made.
'In every of the said daunces there was a continuite
'of moving the foote and body, expressing some
'pleasaut or profitable affects or motions of the
'mind.'**

This account carries the present enquiry no farther back than to somewhat before the author's time, who flourished under Henry the Eighth, and whose book is dedicated to that monarch; and therefore what

‡ Pag. 69. a.

§ Ibid.

¶ Ibid. 69. b.

¶ Of the word Bagenett there is no explanation to be met with in any of our lexicographers, and yet in the collection of poems entitled England's Helicon, is one called the Barginet of Antimachus. Skinner has Bargaret, Tripudium Pastoritium, a dance used by shepherds, from the French Berger a shepherd. For Turgyon no signification is to be found.

The Pavan, from Pavo, a peacock, is a grave and majestic dance; the method of performing it was anciently by gentlemen, dressed with a cap and sword; by those of the long robe in their gowns; by princes in their mantles; and by ladies in gowns with long trains, the motion whereof in the dance resembled that of a peacock's tail. This dance is supposed to have been invented by the Spaniards. Grassineau says its tablature on the score is given in the Orchesographia of Thoinet Arbeau. Every Pavan has its Galliard, a lighter kind of air, made out of the former.

** Ibid. 68. b.

kind of dances were in use during the preceding century cannot at this distance of time be ascertained.

It is highly probable that in this period the Morrice Dance was introduced into this and other countries; it is indisputable that this dance was the invention of the Moors, for to dance a Morisco is a term that occurs in some of our old English writers. The lexicographers say it is derived from the Pyrrhic dance of the ancients, in which the motions of combatants are imitated. All who are acquainted with history know, that about the year 700 the Moors being invited by count Julian, whose daughter Cava, Roderic king of Spain had forced, made a conquest of that country; that they mixed with the natives, built the city of Granada, and were hardly expelled in the year 1609. During their continuance in Spain, notwithstanding the hatred which the natives bore them, they intermarried with them, and corrupted the blood of the whole kingdom: many of their customs remain yet unabrogated; and of their recreations, the dance now spoken of is one. The practice of dancing with an instrument called the Castanet, formed of two shells of the chesnut, is so truly of Moorish original, that at this day a puppet-show is hardly complete without a dance of a Moor to the time of a pair of Castanets, which he rattles in each hand. Nay, the use of them was taught in the dancing-schools of London till the beginning of the present century; and that particular dance called the Saraband is supposed to require, as a thing of necessity, the music, if it may be called so, of this artless instrument.*

But to return to the Morrice Dance, there are few country places in this kingdom where it is not known; it is a dance of young men in their shirts, with bells at their feet, and ribbons of various colours tied round their arms, and slung across their shoulders. Some writers, Shakespeare in particular, mention a Hobby-horse and a Maid Marian, as necessary in this recreation. Sir William Temple speaks of a pamphlet in the library of the earl of Leicester, which gave an account of a set of morrice-dancers in king James's reign, composed of ten men or twelve men, for the ambiguity of his expression renders it impossible to say which of the two numbers is meant, who went about the country: that they danced a Maid Marian, with a tabor and pipe, and that their ages one with another made up twelve hundred years.† It seems by this relation, which the author has given with his usual inaccuracy of style and sentiment, that these men were natives of Herefordshire.

It seems that about the year 1400 the common country dance was not so intricate and mazy as now. Some of the ancient writers, speaking of the Roundelay or Roundel, as a kind of air appropriated to dancing, which term seems to indicate little more

* 'I remember, said an old beau of the last age (speaking of his mother as one of the most accomplished women of her time) 'that when Hamet Ben Hadgi, the Morocco ambassador, was in England, my mother danced a saraband before him with a pair of Castanets in each hand; and that his excellency was so delighted with her performance, that as soon as she had done he ran to her, took her in his arms, and kissed her, protesting that she had half persuaded him that he was in his own country.'

† Miscel. part III. pag. 377.

than dancing in a circle with the hands joined. Stowe intimates that before his time the common people were used to recreate themselves abroad, and in the open air, and laments the use of those diversions which were followed within doors, and out of the reach of the public eye; and while dancing was practised in fields and other open places, it seems to have been no reproach to men of grave professions to join in this recreation, unless credit be given to that bitter satire against it contained in the *Stultifera Navis*, or the *Ship of Fools*, written in Dutch by Sebastian Brant, a lawyer, about the middle of the fifteenth century, afterwards translated into Latin by James Locher, and thence into English by Alexander Barclay, in which the author thus exclaims against it:—

- 'What els is daunfing, but even a nurcery,
- 'Or els a bayte to purchase and mayntayne
- 'In yonge heartes the vile sinne of ribawdry,
- 'Them fettring therin, as in a deadly chayne?
- 'And to say truth, in wordes cleare and playne,
- 'Generous people have all their whole pleafauce
- 'Their vice to norishe by this unthrifty daunce.
- 'Then it in the earth no game is more damnable :
- 'It semeth no peace, but battayle openly ;
- 'They that it use of mindes seme unfable,
- 'As mad folk running with clamour thout and cry.
- 'What place is voide of this furious folly ?
- 'None, so that I doubt within a while
- 'These fooles the holy church shall defile.
- 'Of people what fort or order may we find,
- 'Riche or poore, hye or lowe of name,
- 'But by their foolishness and wanton minde,
- 'Of eche forte some are geven unto the fame.
- 'The priestes and clerkes to daunce have no shame ;
- 'The frere or monke in his frocke and cowle,
- 'Must daunce in his doctour, leping to play the foole.
- 'To it comes children, maydes, and wives,
- 'And flatering yonge men to see to haue their pray,
- 'The hande in hande great falthode oft contrives,
- 'The old quean also this madnes will assay ;
- 'And the olde dotarde, though he scantly may,
- 'For age and lamenes styrrer cyther foote or hande,
- 'Yet playeth he the foole with other in the bande. ‡
- 'Do away with your daunces yc people much unwife,
- 'Defitt your foolishne pleasure of travayle :
- 'It is methinke an unwyfe use and gyfe
- 'To take suche labour and payne without avayle.

The same author censures as foolish and ridiculous the custom of going about the streets with harps, lutes, and other instruments by night; and blames

‡ It seems that the recreation of dancing was in ancient times practised by men of the gravest professions. It is not many years since the Judges, in compliance with ancient custom, danced annually on Candlemas-day in the hall of Serjeant's Inn, Chancery-lane. Dugdale, speaking of the revels at Lincoln's Inn, gives the following account of them:—

'And that nothing might be wanting for their encouragement in this excellent study [the law] they have very anciently had Dancings for their recreations and delight, commonly called revels, allowed at certain seasons; and that by special order of the society, as appeareth in Hen. VI. viz., that there should be four revels that year, and no more; one at the feast of All-hallowen, another at the feast of St. Erkenwald; the third at the feast of the Purification of our Lady; and the fourth at Midsummer-day, one person yearly elected of the society being made choice of for director in those pastimes, called the master of the revels. Which sports were long before then used.' And again he says, 'Nor were these exercises of dancing merely permitted, but thought very necessary, as it seems, and much conducing to the making of gentlemen more fit for their books at other times; for by an order made 6th Feb. 7 Jac. it appears that the under barristers were by decimation put out of commons for example's sake, because the whole bar offended by not dancing on Candlemas-day preceding, according to the ancient order of this society when the judges were present; with this that if the like fault were committed afterwards they should be fined or disbarred.' Dugd. Orig. Jurid. cap. 64.

young men for singing songs under the windows of their lemans: in short, the practice here meant is that of serenading, which is yet common in Spain, and other parts of Europe, and is allowed by him, even in his time, to have been more frequent abroad than in this country. The verses are very humorous and descriptive, and are as follows:—

'The furies fearful, sprong of the floudes of hell,
'Bereft these uagabondes in their minds, so
'That by no meane can they abide ne dwell
'Within their houses, but out they nede must go;
'More wildly wandering then either bucke or doe.
'Some with their harpes, another with their lute,
'Another with his bagpipe, or a foolishe flute.
'Then measure they their songes of melody
'Before the doores of their lemman deare;
'Howling with their foolishe songe and cry,
'So that their lemman may their great folly heare:
'But yet moreover these fooles are so unwise,
'That in colde winter they use the same madnes.
'When all the houses are lade with snowe and yfe,
'O madmen amased unstable, and witless!
'What pleasure take you in this your foolishnes?
'What joy haue ye to wander thus by night,
'Sae that ill doers alway hate the light?
'But foolishe youth doth not alone this use,
'Come of lowe birth, and simple of degree,
'But also states themselves therein abuse,
'With some yonge fooles of the spiritualtie:
'The foolishe pipe without all gravitie
'Doth eche degree call to his frantic game;
'The darknes of night expelleth feare of shame.
'One barketh, another bleateth like a shepe;
'Some rore, some councie, some their ballades fayne
'Another from fingring geveth himself to wepe;
'When his soveraigne lady hath of him disdayne,
'Or shutteth him out: and to be short and playne,
'Who that of this sort best can play the knave,
'Looketh of the other the mayfery to have.
'When it is night, and eche should drawe to rest,
'Many of our fooles great payne and watching take
'To proue mayfryes, and see who can drinke best,
'Eyther at the tauerne of wine or the ale stake,
'Eyther all night watcheth for their lemmans sake,
'Standing in corners like as it were a spye,
'Whether that the wether be whot, colde, wet, or dry.'

The passages above-cited are irrefragable evidence, not only that dancing was a favourite recreation with all ranks of people at the period now spoken of, but that even then it was subject to rule and measure: and here a great difficulty would be found to attend our researches, supposing music to have continued in that state in which most writers on the subject have left it: for notwithstanding the great deal which Voassius and other writers have said concerning the Rythmus of the ancients, there is very little reason to think that they had any method of denoting by characters the length or duration of sounds; the consequence whereof seems to be that the dancing of ancient times must have wanted of that perfection which it derives from its correspondence with mensurable music. Nay if credit be given to the accounts of those writers who ascribe the invention of the Cantus Mensurabilis to Johannes de Muris, we shall be at a loss to account for the practice of regular dancing before the commencement of the fourteenth century; but if the Cantus Mensurabilis be attributed to Franco, the scholastic of Liege, who flourished in

the eleventh century, the antiquity of regular dancing is removed near three hundred years farther back. This historical fact merits the attention of every curious enquirer into the history and progress of music, not only as it carries with it a refutation not of a vulgar, but of a general and universal error, but because without the knowledge of it the idea of dancing to regular measures before the year 1330, is utterly inconceivable.*

CHAP. XLIX.

THE æra of the invention of mensurable music is so precisely determined by the account herein before given of Franco, that it is needless to oppose the evidence of his being the author of it to the ill-grounded testimony of those writers who give the honor of this great and last improvement to De Muris: nevertheless the regard due to historical truth requires that an account should be given of him and his writings, and the order of chronology determines this as the proper place for it.

JOHANNES DE MURIS was a doctor of the Sorbonne, and flourished in the fourteenth century. Mersennus styles him 'Canonicus et Decanus Ecclesiæ Parisiensis.'† The general opinion is, that he was a native of Normandy; but bishop Tanner has ranked him among the English writers; in this he has followed Pits,‡ who expressly asserts that he was an Englishman; and though the Oxford antiquary, following the French writers, says that he was a Frenchman of Paris,§ the evidence of his being a native of England is stronger than even Pits or Tanner themselves were aware of; for in a very ancient manuscript, which it no where appears that either of them had ever seen, and of which a very copious account will hereafter be given, are the following verses:—

'Ihon de Muris, variis floruitque figuris,
'Anglia cantorum nomen gignit plurimorum.

Monsieur Bourdelot, the author of the *Histoire de la Musique et ses Effets*, in four tomes, printed at Paris in 1715, and at Amsterdam in 1725, has grossly erred in saying of De Muris, that he lived in 1553; for it was more than two hundred years before that time, that is to say in 1330, that we are told by writers of the greatest authority he flourished. To shew his mistake in some degree we need only appeal to Franchinus, who in his *Practica Musicae*, printed in 1502, lib. II., besides that he gives the several characters of which De Muris is said to have been the inventor, cap. 13, expressly quotes him by name, as he does also Prosdodimus Beldemandia, his commentator, cap. 4. Glareanus also in his *Dodecachordon*, published at Basil in 1540, has a chapter *De Notarum Figuris*, and has given compositions

* Franco is supposed to have invented the Cantus Mensurabilis about the year 1060; and it is certain that Guido reformed the scale about the year 1028. It is very remarkable that two such considerable improvements in music should be made so nearly together as that the difference in point of time between the one and the other should be less than forty years.

† Harmonic. lib. I. prop. xxv. pag. 8.

‡ Append. 872.

§ Athen. Oxon. 407.

of sundry musicians of that day, in notes of different lengths, that could not have existed, if we suppose that De Muris invented these characters, and consequently that they were not known till 1553.

By the account which Bishop Tanner gives of him in his *Bibliotheca*, it appears that De Muris was a man of very extensive knowledge; and in particular that he was deeply skilled in the mathematics. Indeed the very titles of his books seem to indicate a propensity in the author to the more abstruse parts of learning. His treatise on the Quadrature of the Circle, shews him to have been a geometer; and that on the Alphonsine Tables, an astronomer.*

The tracts on music written by De Muris exist only in manuscript, and appear by Bishop Tanner's account to have been four, namely, one beginning 'Quoniam Musica est de sono relato ad numeros.' 2. Another intitled, 'Artem componendi (metiendi) fistulas organorum secundum Guidonem,' beginning 'Cognita consonantia in chordis.' 3. Another with this title 'Sufficientiam musicæ organicæ editam,' (ita habet MS.) à mag. Johanne de Muris, musico 'sapientissimo, et totius orbis subtilissimo experto,' beginning 'Princeps philosophorum Aristoteles.' 4. Another entitled 'Compositionem consonantiarum' in symbolis secundum Boetium,' beginning 'Omne instrumentum musicæ.'† Besides these Mersennus mentions a tract of his entitled *Speculum Musicæ*, which he had seen in the French king's library, and attentively perused.‡ And Martini has given a short note of the title of another in the words following: 'De Muris Mag. Joan. de Normandia alias Parisiensis Practica Mensurabilis Cantus, cum exposit. Prosdocimi de Beldemandia.' Patav. MS. an. 1404.

The manuscripts of De Muris above-mentioned to be in the Bodleian library, have been carefully perused with a view to ascertain precisely the improvements made by him in mensurable music, but they appear to contain very little to that purpose. Nevertheless, from the title of the tract last-mentioned, there can be scarce a doubt but that it is in that that he explains the nature and use of the character used in mensurable music; and there are yet extant divers manuscripts written by monks, chanters, and precentors in the choirs of ancient cathedrals and abbey-churches, mostly with the title of *Metrologus*, that sufficiently explain the nature of the *Cantus Mensurabilis*, though none so clearly and accurately as the *Practica Musicæ utriusque Cantus* of Franchinus. But besides that many of them attribute to De Muris this improvement, they ascribe to him the invention of characters which there is great reason to believe were

not made use of till many years after his decease. In a tract entitled *Regulæ Magistri Joannes de Muris*, contained among many others in a manuscript collection of musical tracts, herein-before referred to by the appellation of the Manuscript of Waltham Holy Cross, mention is made of the following characters—the Long, the Breve, the Semibreve, the Minim, and the Simple, which can be no other than the Crotchet, inasmuch as two simples are there made equivalent to a minim, and the simple is said to be indivisible, and to be accounted as unity.

Thomas de Walsyngham,§ the author of one of the tracts contained in the above manuscript, and who it is conjectured flourished about the year 1400, makes the number of the characters to be five, namely, the Large, Long, Breve, Semibreve, and Minim. But he adds, that 'of late a New character has been introduced, called a Crotchet, which would be of no use, would musicians remember that beyond the minim no subdivision ought to be made.'

Indeed a strange fatality seems to have attended all the enquiries concerning the particulars of De Muris's improvements; for first no writer has yet mentioned in which of the several tracts, of which he was confessedly the author, they are to be found; secondly, there is a diversity of opinions with respect to the number of characters said to be invented by him. Nay, Mersennus goes so far as to say he had read the manuscripts of Johannes de Muris, which are in the library of the king of France, but never found that he invented any of the characters in modern use.

That these mistaken opinions respecting De Muris and his improvements in music should ever have obtained, is no other way to be accounted for than by the ignorance of the times, and that inevitable obscurity which was dispelled by the revival of literature and the invention of printing. But the greatest of all wonders is, that they should have been adopted by men of the first degree of eminence for learning, and propagated through a succession of ages. The truth is, that in historical matters the authority of the first relator is in general too implicitly acquiesced in; and it is but of late years that authors have learned to be particular as to dates and times, and to cite authorities in support of the facts related by them.

Franchinus indeed may be remarked as an exception to this rule; and whoever peruses his works will find his care in this respect equal to the modesty and diffidence with which he every where delivers his opinion. Now it is worthy of note that throughout his writings the name of De Muris occurs but in very few places; that he ranks him with Marchettus of Padua, Anselmus of Parma, Tinctor, and other writers on the *Cantus Mensurabilis*; and that he is as far from giving the honour of that invention to De Muris as to Prosdocimus Beldemandia, his commentator. Neither do the authors who wrote

* The Alphonsine Tables derive their name from Alphonsus, surnamed the Wise, king of Leon and Castile about the year 1260; a man possessed of so great a share of wisdom, learning, and other great qualities, that we are unwilling to credit Lipsius when he relates, as he does, that having read the Bible fourteen times through, and deeply considered the fabric of the universe, he uttered this impious sentiment:—'That if God had advised with him in the creation, he would have given him good counsel.' As to the tables that bear his name, they are founded on the calculations of the ablest astronomers and mathematicians of his time, employed by him for that purpose, and were completed at an expence of not less than four hundred thousand crowns.

† These are all in the Bodleian library, and may easily be found by the help of the printed catalogue, and the references to them in the article *Muris*, in Tanner's *Bibliotheca*.

‡ Harmonic. lib. I. prop. xxv. pag. 8. Harm. univ. part II. pag. 11.

§ The name of this person does not occur in any catalogue of English writers on music. Bishop Tanner mentions two of that name, the one an historian, the other precentor of the abbey-church of St. Alban: that the latter of these was the author of the above-mentioned treatise is very probable. Tanner, pag. 753, in not.

immediately after Franchinus, as namely, Peter Aron, Glareanus, Jacobus Faber Stapulensis, Ottomarus Luscinius, or any other writer of the German or Italian schools before the year 1555, as far as can be collected from an attentive perusal of their works, assert, or even intimate, that the characters now used to denote the length or duration of sounds in music were contrived by Johannes De Muris; and the declaration of Mersennus above-cited may almost be said to be evidence of the contrary. Upon this state of facts a question naturally arises, to what mistaken representation is it owing that the honour of this important improvement in music is ascribed to one who had no title to it, and that not by one, but many writers? for Zarlino, Berardi, and all the Italians, Kircher, Brossard, and Bourdelot relate it with a degree of confidence that seems to exclude all doubt.

An answer to this question is at hand, which upon the face of it has the appearance of probability. In short, this erroneous opinion seems to have been originally entertained and propagated by an author whose character as a musician has held the world in suspense for two centuries; and it seems hardly yet determined whether his ingenuity or his absurdity be the greater. The person here meant is Don Nicola Vicentino, a Roman musician, hereinbefore spoken of, as having attempted to restore the ancient genera, who flourished about the year 1492, and in 1555 published at Rome, in folio, a work entitled *L'Antica Musica Ridotta alla moderna Pratica, con la Dichiaratione, et con gli Esempi de i tre Generi, con la loro Spetie*, which contains the following relation:—

'After the invention of the hand by Guido, and the introduction of the stave with lines, the method to express the sounds was by points placed on those lines; from whence it became a usual form of commendation of a cantus for more voices than one, to say, "Questo e' un bel contrapunto," "this is a fine counterpoint;" plainly indicating that the notes were placed against each other, and consequently that they were of equal measures. But Giovanni de Muris, grandissimo Filosofo in the university of Paris, found out the method of distinguishing by eight characters the notes which we now place on the lines and spaces, and also invented those characters the circle and semicircle, traversed and untraversed, together with the numbers, as also the written marks for pauses or rests; all which were added to his invention of the eight characters. Others added the round b to e la mi in their compositions, and likewise the mark of four strokes, described in this manner ♯; and so from time to time one added one thing, and another another, as happened a little while ago, when in the organ to the third a la mi re above g sol re ut, a fifth was formed in e la mi with a round b, or, as you may call it, e la mi flat: * and from those characters ♯ and b, and also this ♯, many others have been

* This is a very curious anecdote, for it goes near to ascertain the time when many of the transposed keys could not have existed. The author is however mistaken in making e la mi b the fifth to a la mi re, for it is an interval consisting of but three tones. He had better have called it the fourth to b fa, which is truly so.

'invented of great advantage to music, for I am of opinion that the characters ♯ and b were the first principles upon which were invented the eight musical figures now treating of; for John De Muris being desirous of distinguishing those several figures the Large, Long, Breve, Semibreve, Minim, Semiminim, or Crotchet, Chroma, or Quaver, and Semichroma, was necessitated to seek such forms as seemed to him fittest for the purpose, and by the help of these to frame such other characters as could be best adapted to musical practice; and to me it seems that none could be found so well suited to his intention as these two of ♯ and b.

'For first it is to be observed that the breve ♯ is derived from ♯, and so also are the large and the long; the breve being but ♯ without legs, and the large and the long being the same ♯ with one leg, with this only difference, that the large ♯ exceeds considerably in magnitude the long ♯. From the other of the two characters above-mentioned, viz., b, was formed the semibreve O, or e, by cutting off the leg. After the philosopher had so far adjusted the form of the characters, he assigned them their proper names; and first to that note which was simply the ♯ without the legs, he gave the name of Breve, thereby meaning to express only the shortness of its proportion in comparison with the figure from whence, as has been shewn, it was derived.

'It seems that the breve and the semibreve were the roots from whence the several other notes of addition and diminution sprang; and seeing that a greater variety was wanting, De Muris, for the avoiding a multiplicity of characters, as it were gave back the leg of the breve, and placing it on the right side ♯, called it a long, giving to it twice the value or time of the breve. Farther, he added to the long half its breadth ♯, and called it a large, at the same time assigning to it the value of two longs.

'From those several characters arose the invention of various tyings and bindings, and other combinations, called by modern writers, Ligatures, some in a square or horizontal position, and others in a direction oblique, and both ascending and descending, as the progression of the sounds required; but of these it is not here intended to treat.

'Having spoken sufficiently of the origin and use of the Breve, the Long, and the Large, it remains to account for the invention of the Minim, the Semiminim, Chroma, and Semichroma, which, as have already been mentioned, were generated from the b round. As to the semibreve, it is clearly the b round without a leg; and the minim is no other than the semibreve with a stroke, proceeding not from either side, but from the middle of the figure thus ♯, in order that no confusion might arise from its similitude to b. And to this character was assigned half the value of the semibreve. From the same figure diversified by blackness, and by marks added to the leg, the philosopher formed three other characters of different values, the first was the semiminim ♯, in value, as its name imports, half the

'minim; and which is no other than the minim blackened. To the leg of this semiminim he added a little stroke thus ♯, and thereby reduced it to half its value, and called the character thus varied a Chroma: he proceeded still farther, and by the addition of a little stroke to the chroma formed the Semichroma ♯.†

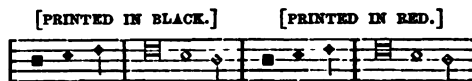
Kircher delivers the above as his opinion also, for after relating the manner of Guido's improvement of the scale, he expresses himself to the following purpose:—

'And these were the elements of the figurate music of Guido, which, like all other inventions, in their infancy, had something I know not what of rude and unpolished about it, while, instead of notes, points only, without any certain measure or proportion of time were used, which was the case till about two hundred years after, when Joannes de Muris resuming the invention of Guido, completed the musical art, for from H and b, by which characters Guido was accustomed to distinguish certain notes in his system, he produced those characters, whereof each was double to the preceding one, as to the measure of its time; the first note produced from b he called the minim, and the same blackened the semiminim; the latter character with a tail he called Fusa, and that with two tails Semifusa; so that there proceeded from b only four different species of character, namely, the minim, semiminim, fusa, and semifusa; † and from b hard or square H he formed the remaining notes of a longer time, except that from H defective, and wanting both tails, he formed the breve, and from b round the semibreve.‡

After such a testimony as this of Kircher, it may be unnecessary to add that the modern writers seem to be as unanimously agreed in attributing the invention of all the characters used to denote the measure of sounds to De Muris, as they are in ascribing the reformation of the ancient Greek scale to Guido Aretinus. But in this they are greatly mistaken, and the account herein-before given of Franco is undeniable evidence of the country.

Morley, who was a man of learning in his profession, and a diligent researcher into such matters of antiquity as were any way related to it, has in the annotations on the first book of his Plain and easie Introduction to practical Musick, given a short history of the art of signifying the length or duration of sounds by written characters, which, as it is curious, is here given in his own words: 'There were in old time foure maners of pricking [writing

'of music], one al blacke, which they termed blacke Full, another which we use now, which they called blacke Void; the third all red, which they called red Ful, the fourth red, as ours is blacke, which they called redde Void; al which you may perceive thus:—



'But if a white note (which they called blacke voide) happened amongst blacke full, it was diminished of halfe the value; so that a minime was but a crotchet, and a semibreve, a minime, &c. If a redde full note were found in blacke pricking, it was diminished of a fourth part; so that a semibreve was but three crotchets, and a red minime was but a crotchet: and thus you may perceive that they used their red pricking in al respects as we use our blacke noweadaies. But that order of pricking is gone out of use now, so that wee use the blacke voides as they used their blacke fulles, and the blacke fulles as they used the red fulles. The redde is gone almost quite out of memorie, so that none use it, and fewe knowe what it meaneth, Nor doe we pricke anye blacke notes amongst


'white, except a semibreve thus ♯ in which case the semibreve so blacke is a minime and a pricke (though some would have it sung in tripla maner, and stand for $\frac{3}{2}$ of a semibreve), and the blacke minime a crotchet, as indeede it is. If more blacke semibriefes or briefes bee together, then is there some proportion; and most commonly either Tripla or Hemiolia, which is nothing but a rounde common tripla or sesquialtera. As for the number of the formes of notes, there were within these two hundred yeares but foure knowie or used of the musytions: those were the Longe, Briefe, Semibreve, and Minime. The minime they esteemed the least or shortest note singable, and therefore indivisible. Their long was in three maners, that is, either simple, double, or triple; a simple long was a square form, having a tail on the right side, hanging downe or ascending; a double long was so formed as some at this daie frame their larges, that is as it were compact of two longs. The triple was bigger in quantitie than the double; of their value we shall speake hereafter. The semibreve was at the first framed like a triangle thus ▴, as it were the halfe of a briefe, divided by a diameter thus ▢; but that figure not being comly, or easie to make, it grew afterward to the figure of a rhombe or loseng thus ◊, which forme it still retaineth. The minime was formed as it is now, but the taile of it they ever made ascending, and called it Signum Minimitatis in their Ciceronian Latine. The invention of the minime they ascribe to a certaine priest (for who he was I know not) in Navarre, or what cuntry else it was which they tearmed Navernia; but the first who used it was one Philippus De Vitriaco, whose motetes for some time were of al others best esteemed and most used in the church. Who invented the

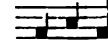
* The writers on the Cantus Mensurabilis seem to have been hard put to it to find names for their characters. Franchinus and his followers call the semiminim Fusa, which in the barbarous Latin signifies a Spindle. Litt. We at this day call it a crotchet, but that name seems more properly to belong to the quaver, by reason of its curved tail, the word crotchet being, as Butler says, Princ. of Mus. pag. 28, derived from the French Croc, a crook. The word Chroma, which in the Greek signifies Colour, is properly enough given to those characters that are not evacuated, but coloured either black or red; and if so, it is in strictness common to all the characters under the minim, and cannot be appropriated to the quaver.

† Isaac Vossius censures the terms Maxima, Longa, Breve, Semibreve, Minima, Semiminima, Fusa, and Semifusa, as barbarous. De Poem. Cant. et Virib. Rhythmi, pag. 128.

‡ Musurg. tom. I. pag. 556.

'crotchet, quaver, and semiquaver, is uncertaine. 'Some attribute the invention of the crotchet to the 'afore-named Philip, but it is not to be found in his 'workes; and before the saide Philip the smallest 'note used was a semibriefe, which the authors of 'that time made of two sortes, more and less; for 'one Francho divided the briefe, either in three equal 'partes (terming them semibriefes) or in two unequal 'partes, the greater whereof was called the more 'semibriefe (and was in value equal to the imperfect 'briefe): the other was called the less semibriefe, as 'being but halfe of the other aforesaid. This Francho 'is the most ancient of all those whose workes of 'practical music have come to my handes: one 'Roberto De Haulo hath made as it were commen- 'taries upon his rules and termed them Additions. 'Amongst the rest, when Francho setteth downe that 'a square body having a taile coming downe on the 'right side is a long, he saith thus: "Si tractum "habeat à parte dextra ascendente, erecta vocatur ut

"hic;  ponuntur enim iste longæ erectæ "ad differentiam longarum quæ sunt rectæ et vocantur "erectæ quod ubicunque inveniuntur per semitonium "eriguntur," that is, "if it have a taile on the righte "side going upwards, it is called erect or raised

"thus:  for these raised longes be put "for difference from others which be right, and are "raised because wheresoever they be found, they be "raised halfe a note higher;" a thing which I be- 'lieve neither he himselfe, nor any other ever saw in 'practice. The like observation he giveth of the 'briefe, if it have a taile on the left side going 'upward. The large, long, briefe, semibriefe, and 'minime (saith Glareanus) have these seventy yeares 'been in use; so that reckoning downward from 'Glareanus his time, which was about fiftie years 'ago, we shal find that the greatest antiquitie of our 'pricked song is not above 130 years old.*

The account above-given from Morley is extremely curious, and coincides with the opinion that De Muris was not the inventor of the characters for notes of different lengths; and lest the truth of it should be doubted, recourse has been had to those testimonies on which it is founded; and these are evidently the writings of ecclesiastics and others, who treated on this part of musical science in the ages preceding the time when Morley wrote. A valuable collection of tracts of this kind in a large volume, was extant in the Cotton library in the year 1731, when a fire which happened at Ashburnham-house in Westminster, where it was then deposited, consumed many of the manuscripts, and did great damage to this and divers other valuable remains of antiquity. It fortuneed however that before that accident a copy had been taken of this volume by Dr. Pepusch, which is now extant,† and it appears to contain some of the

* Mori. Introd. Annotations on the first part.

† Dr. Smith, in his Catalogue of the Cotton Library, pag. 24, has given the title of the tracts contained in the volume; and Mr. Castley, in the Appendix to his catalogue of the king's library, pag. 314, has given the following note concerning it:—"Tissarivs, B. IX. burnt to a crust. Dr. Pepusch has copies of the 3, 4, and 5th tracts." It seems by Dr. Pepusch's copy that the musical tracts were at least seven in number; they make together two hundred and ten folio pages.


tracts expressly referred to by Morley, and by means thereof we are able not only to clear up many difficulties that must necessarily attend an enquiry into the state of music during that long interval between the time of Guido, and the end of the fifteenth century, when Franchinus flourished, but to establish the authority of Morley's testimony in this respect beyond the possibility of a doubt.

The manuscript above-mentioned contains several treatises, and first that of Roberto De Haulo, as Morley calls him, though by the way his true name was Handlo,‡ which he says is a kind of commentary on the rules of Franco, and are termed Additions.

It is now near four hundred and fifty years since this copy was made, as appears by an inscription at the end of it, importing that it was finished on Friday next before the feast of Pentecost, A. C. 1326.

Of this writer, Robertus De Handlo, no account can be found, except in the Bibliotheca of bishop Tanner, taken from the manuscript above-mentioned. It is however worth observing that the above date, 1326, carries the supposed invention of De Muris somewhat farther backward than the time at which most writers have fixed it.

But, to proceed, in a tract of an uncertain author, part of the Cotton manuscript above spoken of, mention is made of red notes, and the reader is referred to the motetts of Philippus De Vitriaco for instances of notes of different colours.

Morley says that 'the antient musytions esteemed 'the minime the shortest note singable;' this is in a great measure confirmed by a passage above-cited from Thomas De Walsyngham, and is expressly said by Franchinus. Morley farther says that the invention of the minim is ascribed to a certain priest in Navarre, for so he translates Naverina; but that the first who used it was Philippus De Vitriaco; and that some attribute the invention of the crotchet to the aforesaid Philip, but it is not found in his works. To this purpose the following passage, which Morley evidently alludes to, may be seen in the copy of the above-cited manuscript: *Figura verò minima est corpus oblongum ad modum losongæ gerens tractum recte supra capite qui tractus signum minitantis dicitur, ut hic*  *De minima verò Magister FRANCO mentionem in sua arte non facit sed tantum de longis et brevibus, ac semibrevibus, Minima autem in Naverina inventa erat, et à PHILIPPO DE VITRIACO, § qui fuit filios totius mundi musicorum approbata et usitata; qui autem dicunt predictum Philippum crochatum sive semiminimam aut drag-*

‡ DE HANDLO is a proper surname: by the Chronica Series, at the end of Dugdale's Origines Juridicales, it appears that NICHOLAS DE HANDLO was a justice of the court of Common Pleas, and a justice itinerant. Ann. 1256.

§ It seems that this Philip was much celebrated. In a poem printed among Skelton's works, 12mo. 1736, entitled A Treatise betwene Trough and Informacion, said to be written by William Cornishe, chapelman to the most famous and noble kynge Henry VII., is the following stanza:—

I affayde theis tunes, methought them not swete,
The concordres were nothyng musical,
I called masters of musike cunying and discrete;
And the first pryncple, whose name was Tuballe,
Guido, Boice, John de Murris, Vitryaco, and them al
I prayed them of helpe of this combrous fonge,
Pricked with force and letted with wronge.

mam fecisse aut eis concessisse, errant, ut in notis suis manifeste apparet.

Each of the several measures above-enumerated, that is to say, the large, long, breve, semibreve, and minim, had then, as now, their correspondent pauses or rests; these were contrived to give time for the singers to take breath; besides this they contributed to introduce a variety of neumas or points; the difference occasioned thereby is obvious.

But besides the characters invented to denote the measures of time which were simple and distinct, there were certain combinations of them used by the ancient musicians, known by the name of Ligatures; of the invention whereof no satisfactory account is any where given. The earliest explanation of their nature and use seems to be that text of Franco, upon which the additions of Robertus De Handlo are a comment. Farther back than to these rules and maxims, or, as his commentator styles them, the Rubric, probably from the red character in which they might have been written, to distinguish the text from the comment, it would be in vain to look for the doctrine of the ligatures, they were most probably of his own invention, and seem to be coeval with mensurable music.

Upon the whole it seems to be clear that Franco, and not De Muris, is intitled to the merit of having invented the more essential characters, by which the measures of time are adjusted, with their respective pauses or rests; and it detracts very little from the merit of this improvement to say that the lesser measures were invented by others, since the least attention to his principles must have naturally suggested such a subdivision of the greater characters as could not but terminate in the production of the lesser. We have seen this kind of subdivision carried much farther than either Franco, Vitriaco, or any of their followers, thought necessary; and were any one to extend it to a still more minute division than we know of at present, the merit of such a refinement would hardly insure immortality to its author.

CHAP. L.

THE rules of Franco, and the additions of his commentator, shew that the ligatures were in use as early at least as the year 1236. By another tract, of an anonymous author, written, as it is presumed at a small distance of time after the former, and of which an account will be given hereafter, it appears that this invention of the ligatures was succeeded by another variety in the method of notation, namely, evacuated, or, as Morley calls them, void characters, concerning which it is laid down as a rule, that every full or perfect character, if it be evacuated, receives a diminution, and loses a third part of its value, as for instance, the perfect semibreve ⋈ , which when full is equal in value to three minims, is when evacuated ⋈ reduced to the value of two; and the same rule holds with respect to the breve, the long, and the large, and also to the punctum or semiminim.

Other modes of diminution are here also mentioned, as the cutting off the half of either a full or

an evacuated character, as here ⋈ , by which they are respectively reduced to half their primitive value. Another kind of diminution consisted in the use of red instead of black ink, which it seems at that time was a liquid not always at hand, as appears by this passage of the author: 'The diversities of time may be noted by red characters, when you have wherewithal to make red characters, and these also it is allowed to evacuate.'

The signs of augmentation are here also described, as first that of a point after a note, which at this day is used to encrease its value by one half. Another sign of augmentation, now disused, was a stroke drawn from any given character upwards, as here ⋈ , where a minim is augmented so as to be equal in value to a semibreve.

It appears very clearly from this little tract, and also from numberless passages in others, written about the same time and after, that in music in consonance, the part of all others the most regarded, and to which the rest seem to have been adapted, was the tenor, from the verb *teneo*, to hold. This was the part which contained the melody, and to this the other parts were but auxiliary.

Those who consider how very easily all the measures of time, with their several combinations, are expressed by the modern method of notation, will perhaps wonder to find that the *Cantus Mensurabilis* makes so considerable a part of the musical treatises written about this time; and that such a diversity of opinions should subsist about it as are to be found among the writers of the fourteenth century. The true reason of all this confusion is, that the invention was new, it was received with great approbation, and immediately spread throughout Europe; the utility of it was universally acknowledged, and men were fond of refining upon, and improving a contrivance so simple and ingenious; but they carried their refinements too far, and we are now convinced that the greater part of what has been written on the subject since the time of De Muris might very well have been spared.

As to the ligatures, they are totally disused; every conjunction of notes formerly described by them being now much more intelligibly expressed by separate characters conjoined by a circular stroke over them, and to this improvement the invention of bars has not a little contributed. The doctrine of the ligatures can therefore no farther be of use than to enable a modern to decypher as it were, an ancient composition, and whether any of those composed at this early period be worthy of that labour may admit of a question. If it should be thought otherwise, enough about the ligatures to answer this purpose is to be found in Morley, and other writers his contemporaries.

It may however not be improper to exhibit a general view of the simple and unligated characters of those times, and to explain the terms Perfection and Imperfection as they relate to time, which latter cannot be better done than from the manuscript treatise last above-cited.

It is to be observed that in mensurable music

perfection is ascribed to the Ternary, and imperfection to the Binary number, whether the terms be applied to longs, breves, or semibreves; for as to the minim, it is simple, and incapable of this distinction. The reason the ternary number is said to be perfect is that it has a beginning, a middle, and an end. If a compounded whole contains two equal parts, it is said to be imperfect, if three it is perfect: two minims make an imperfect, and three minims a perfect semibreve, and so of the larger measures; and this rule is general.

With respect to the unligated characters, though few in number, their different adjuncts and various modifications rendered their respective values so precarious, that whole volumes have been written to explain their nature and use. Indeed, towards the end of the sixteenth century much of this kind of learning was become obsolete, and the modes of time with their several diversities were reduced within an intelligible compass. In order however to understand the language of these writers, it may be necessary to explain the terms used by them, and exhibit a general view of mensurable music in this its infant state.

And first with respect to the terms, the most essential were Mode, Time, and Prolation; and to each of these, as applied to the subject now under consideration, a secondary sense was affixed widely different from its primitive meaning. In the first place the word Mode was made to signify that kind of progression wherein the greater characters of time were measured by the next lesser, as larges by longs, or longs by breves. Where the admeasurement was of breves by semibreves it was called Time; perhaps for this reason, that in musical speech Semibreve and Time are convertible terms, it being formerly, as usual, to say for instance a pause of two or more Times, as of so many semibreves;* and lastly, if the admeasurement was of semibreves by minims, it was called Prolation.† Vide Morley, pag. 12. Franch. Pract. Mus. lib. II. cap. iii. ix.

* Grasséus, in his *Dodecachordon*, lib. III. cap. viii. pag. 203, and Ornithoparcus in his *Micrologus*, translated by John Douland, pag. 46, say that time is measured by a semibreve. Morley, *Introd.* pag. 9, calls a time a stroke, and gives examples of semibreves for whole strokes or times. Nevertheless he adds that there is a more stroke, comprehending the time of a breve, but that the less stroke seems the most usual. Butler says the principal time-note is the semibreve, by whose time the time of all notes is known; and that it is measured by tactus, or the stroke of the hand. *Princ. of Music*, lib. I. cap. ii. § iv. And in a note on the above passage he speaks thus:—“As in former time, when the semibreve and minim were the least notes, the breve was the measure-note, or principal time-note (by which being measured by the stroke of the hand, the just time of all other notes was known) so since the inventing of the smaller notes (the breve growing by little and little out of use) the semibreve became the measure-note in his stead; as now in quick time the minim beginneth to encroach upon the semibreve.”

† The time-stroke of the breve Listenius termeth Tactus major, and of the semibreve tactus minor, the which he doth thus define:—“Tactus major est, cum brevis tactu mensuratur: Minor est, cum semibrevis sub tactum cadit integrum.” But now the semibreve time is our major tactus, and the minim-time our Tactus minor.

‡ The Tactus major of Listenius, which gives a breve to a stroke, is the time that is meant in the canons of fugues, as “fuga in unisono, post duo tempora: i. e. post 4 semibreves.” *Ib.* pag. 28.

§ Prolation, from the Latin Prolatio, a speaking, uttering, or pronouncing, in the language of musicians, signifies generally singing as opposed to pausing or resting. But in the sense in which it is here used it is supposed to mean singing by the notes that most frequently occur, viz., Minims; for Listenius remarks that the notes invented since the Minim served rather for instrumental than vocal music. Vide Butl. pag. 28. Andreas Ornithoparcus in his *Micrologus*, lib. II. cap. iv. thus explains the term:—“Prolation is the essential quantile of semibreves; or it is the setting of two or three minims against one semibreve; and it is twofold, so wit, the greater, which is a semibreve measured by

To each of those, that is to say Mode, Time, and Prolation, was annexed the epithet of Perfect or Imperfect, according as the progression was of the ternary or binary kind; and amongst these such interchanges and commixtures were allowed, that in a cantus of four parts the progression was frequently alternative, that is to say, in the bass and contra-tenor binary, and in the tenor and altus ternary, or otherwise in the bass and contra-tenor ternary, and in the tenor and altus binary.

This practice may be illustrated by a very familiar image; a cantus of four parts may be resembled to a tree, and the similitude will hold, if we suppose the fundamental or bass part to answer to the root, or rather the bole or stem, the tenor to the branches, the contra-tenor to the lesser ramifications, and the altus to the leaves. We must farther suppose the bass part to consist of the greater simple measures, which are those called longs, the tenor of breves, the contra-tenor of semibreves, and the altus of minims. In this situation of the parts, the first admeasurement, viz., that which is made by the breaking of the longs into breves, acquires the name of mode; the second, in which the breves are measured by semibreves, is called time; and the third, in which the semibreves are broken into minims, is termed prolation, of which it seems there were two kinds, the greater and the lesser; in the former the division into minims was by three, in the latter by two, answering to perfection and imperfection in the greater measures of the long, the breve, and the semibreve.

As to the modes themselves, they were of two kinds, the greater and the lesser; in the one the large was measured by longs, in the other the long was measured by breves.‡ There were also certain arbitrary marks or characters invented for distinguishing the modes, such as these O ⊙ ⊕; but concerning their use and application there was such a diversity of opinions that Morley himself professes almost to doubt the certainty of those rules, which, being a child, he had learned with respect to the measures of the Large and the Long.§ And farther he says that though all that had written on the modes agree in the number and form of degrees, as he calls them, yet should his reader hardly find two of them tell one tale for the signs to know them. For time and prolation he says there was no controversy, but that the difficulty rested in the modes;|| for this reason he has bestowed great pains to explain the several characters used to distinguish them, and rejecting such as he deemed mere innovations, has reduced the matter to a tolerable degree of certainty.

For first he mentions an ancient method of denoting the degrees, which, because it naturally leads to an illustration of the subject, is here given in his own words: ‘The ancient musitians’ (by whom

‘three minims, or the comprehending of three minims in one semibreve, and the lesser, wherein the semibreve is measured by two minims only,’ Grasséus, notwithstanding he had Brossard before him, betrays great ignorance in calling prolation the art of shaking or making several inflexions of the voice on the same note or syllable, a practice unknown to the ancients, and not introduced till the middle of the last century.

‡ Morl. *Introd.* pag. 12, 13.

§ Annotat. on book I. pag. 12. ver. 16.

|| *Ibid.*

we understand those who lived within about three hundred years preceding the time when Morley wrote) 'did commonlie sette downe a particular signe for every degree of music in the song; so that they having no more degrees than three, that is the two modes and time, (prolation not being invented,) they set down three signs for them: so that if the great moode were perfect it was signified by a whole circle, which is a perfect figure, and if imperfect by a halfe circle. Therefore wheresoever these signs O 33 were set before any songe, there was the great moode perfect signified by the circle, the small moode perfect signified by the first figure of three, and time perfect by the last. If the song were marked thus C 33, then was the great moode unperfect, and the small moode and time perfect. But if the first figure were a figure of two thus C 23, then were both moodes unperfect, and time perfect. If it were thus C 22, then were all unperfect. But, if in all the songe there were no large, then did they set downe the signes of such notes as were in the songe, so that if the circle or semicircle were set before one onelie cifer, as O 2, then did it signifie the lesse moode, and by that reason that circle now last sette downe with the binarie cifer following it, signified the lesse moode perfect, and time unperfect. If thus C 2, then was the lesse moode unperfect, and time perfect. If thus C 3, then was both the lesse moode and time unperfect, and so of others. But since the prolation was invented, they have set a pointe in the circle or halfe-circle, to shew the More prolation, which notwithstanding altereth nothing in the moode nor time. But these are little used now at this present.'

The above-cited passage is taken from the annotations on the first book of Morley's Introduction.* His account of the characters used to distinguish the several modes is contained in the text,† and by that it appears that in his time, and long before, the Great Mode Perfect, which, as he says, gave to the large three longs, was thus signified O 3. The Great Mode Imperfect, which gave to the large only two longs, thus C 3. The lesser mode which measured the longs by breves, was also either perfect or imperfect: the sign of the former, wherein the long contained three breves, was this O 2; that of the latter, wherein the long contained only two breves, was this C 2. As to Time, which was the measure of breves by semibreves, that also was of two kinds, perfect and imperfect: perfect time, which was when the breve contained three semibreves, had for signs these marks O 3. C 3. O. Imperfect time, which divided the breve into semibreves, had these O 2. C 2. C. As to Prolation, that of the More, wherein the semibreve contained three minims, its signs were a circle or half circle with a point thus ⊙ ⊙. Prolation of the less, which was when the semibreve was but two minims, was signified by the same characters without a point, as thus O C.

From all which the same author deduces the following position, 'that the number doth signifie the mode, the circle, the time, and the presence or absence of the poynt the prolation.'‡

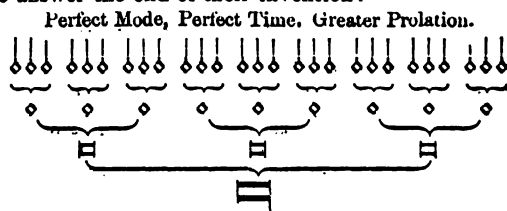
* Viz., on pag. 18, vers. 18. † Pag. 13. ‡ Pag. 14.

So much as above is adduced for the explanation of the degrees and the signs or marks by which they were anciently distinguished, seems absolutely necessary to be known, in order to the understanding a very elaborate and methodical representation of all the various measures of time, with their several combinations contained in a collection of tracts already mentioned by the name of the Cotton manuscript, and frequently referred to in the course of this enquiry concerning the doctrine and practice of mensurable music. A more particular account of this invaluable manuscript, with a number of copious extracts therefrom, is inserted in that part of this work wherein the aid of such intelligence as it abounds with seems most necessary.

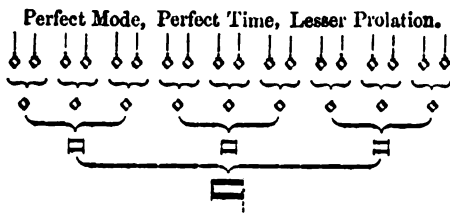
It is true that for this purpose recourse might have been had to the printed works of Franchinus, Glareanus, and other ancient writers, who have written on the subject, and whose authority in this respect is unquestionable. But to this it is answered, that not only Glareanus, but Franchinus, who on account of his antiquity is justly deemed the Father of our present music, represent the Cantus Mensurabilis as in a state of maturity: and our business here is not so much to explain the principles of the science, as to trace its progress, and mark the several gradations through which it is arrived to that state of perfection in which we now behold it.

If this be allowed, it will follow that in a regular deduction of the several improvements from time to time made in music, the earliest accounts are the best: and, setting aside other evidences, when it has been mentioned that the MS. above referred to abounds with frequent commendations of learned and skilful musicians, such as Guido, Boetius, Johannes De Muris, and others now less known, but who are notwithstanding highly celebrated by its author, while the names of Franchinus and Glareanus do not once occur in it: when all this is considered, the point of precedence in respect of antiquity, which is all that is now contended for, will appear to be in a manner settled, and we shall be driven to allow that in this particular the testimony of these writers is of less authority than the manuscript here spoken of.

For this reason the following types, as being of very great antiquity, are here inserted as a specimen of the method which the ancient writers made use of, to represent the several degrees of measures, and the order in which they are generated. The author, whoever he was, has given them the name of musical trees, and although Doni in his treatise *De Præstantia Musicæ Veteris*§ in ridicule of diagrams in this form, terms them cauli-flowers, they seem very well to answer the end of their invention:—



§ Pag. 16, where the author is unwarrantably severe in his censure of rhythmical music, and the characters used to denote it.



The several other species of mode, time, and prolation, are represented in like manner, *mutatis mutandis*; and the last or most minute division of the greater quantity in the *Cantus Mensurabilis* is exhibited in a scheme that gives to the triple long no fewer than eighty-one minims, and may be easily conceived, of, by means of the two foregoing examples.

None of the several modal characters described by Morley, are annexed to any of the foregoing types; nor do any of those marks or signs, invented to denote the time and prolation, occur among them; but the author has in a subsequent paragraph given an explanation of them, which coincides very nearly with that of Morley. The augmentation of measures, by placing a point after a breve or other character, is also here mentioned, as are likewise sundry methods of diminution, whereby a perfect measure is rendered imperfect; and amongst the rest the diminution by red characters, which he says are used in motets, and frequently in those of Philippus de Vitriaco, for three reasons, namely, to signify a change in the mode, the time, or the prolation. As to the Pauses or Rests, the marks or characters made use of by the ancient writers to denote them, correspond exactly with those which we meet with in the works of other writers on the subject of mensurable music.

The foregoing pages contain an account of the invention of, and the successive improvements made in, the *Cantus Mensurabilis*, which, as it is collected from the writings of sundry authors extant only in manuscript, and whose works were probably composed for the instruction of particular fraternities in different countries, and at different times, and consequently had never received the sanction of public approbation, is necessarily incumbered with difficulties: the truth of the matter is, that this branch of musical science had not acquired any great degree of stability till towards the close of the fourteenth century; for this reason the farther consideration of mensurable music, and such a representation of the measures of time, with their several modifications as corresponds with the modern practice, is referred to that part of the present work, where only it can with propriety be inserted.

In order to judge of the effects of this invention, and of the improvements which by the introduction of the *Cantus Mensurabilis* were made in music, it will be necessary to take a view of the state of the science in the ages next preceding the time of this discovery; and though some of those writers, who had the good fortune to live in a more enlightened age, have affected to treat the learning of those times with contempt; and, overlooking the ingenuity of such men as Guido, Franco, De Handlo, De Muris,

Vitriaco, Tincto, and many others, have reproached them with barbarism, and the want of classical elegance in their writings, perhaps there are some who consider philology rather as subservient to the ends of science, than as science itself; and who may think knowledge of more importance to mankind than the form in which it is communicated; such men may be inclined to excuse the want of that elegance which is the result of refinement, and may be pleased to contemplate the progress of scientific improvement, without attending to the structure of periods, or bringing a Monkish style to the test of Ciceronian purity.

The first considerable improvement after the regulation of the tones by Gregory the Great, and the establishment of the chant known by his name, was the invention of Polyphonus music, exemplified at first in that extemporaneous kind of harmony, which was anciently signified by the term *Descant*.*

Guido, besides new modelling the scale, and converting the ancient tetrachords into hexachords, found out a method of placing the points in the spaces, as well as on the lines. This, together with the cliffs, rendered the stave of five lines nearly commensurate to the whole system, and suggested the idea of written descant, for the notation whereof nothing more was required than an opposition of point to point; and to music written according to this method of notation, the monks, very soon after its invention, gave the name of *Contrapunctum*, *Contrapunto*, or *Counterpoint*; appellations, in the opinion of many, so strongly favouring of the barbarism of the times in which they were first introduced, as not to be atoned for by their precision.

From hence it will pretty clearly appear that counterpoint, that is to say the method of describing descant by such characters as we now use, was the invention of Guido. But it does by no means follow that he was the inventor of symphoniac music; on the contrary it has been shewn that it was in use among the northern inhabitants of this kingdom, and that so early as the eighth century, and that Bede had given it the name of *Descant*.

To the evidences already mentioned in support of this assertion, it may here be added, that the invention and use of the organ amounts to little less than a proof that symphoniac music was known long before Guido's time. The fact stands thus: the organ, not to reassume the enquiry as to the time of its invention, was added to church music by pope Vitalianus, who, as some say, was advanced to the papacy anno 655, though others postpone it to the year 663. Those of the first class fix the æra of the introduction of the organ into the choral service precisely at 660, the others by consequence somewhat later. And Guido

* If we allow for the difference between written and extemporary music it will appear that the modern acceptation of the word *Descant* differs very little from that of the eighth century. See ante, Book IV, page 150. For a learned musical lexicographer thus explains it:—

DISCANTO [Ital.] *DISCANTUS* [Lat.] quasi *BISCANTUS*, *i. e.*, diversus cantus, not only because this part being the highest of many admits of the most coloratures, divisions, graces, and variations of any, but because the earlier writers among the moderns used to call a figurate song, in contradistinction to *Canto-fermo* or *Plain-song*, *Discantum*; and what we now call the composing of figurate music, *discanture*. Walth. Lex. in Art.

himself, besides frequently mentioning the organ in the *Micrologus*, recommends the use of it in common with the monochord, for tuning the voice to the several intervals contained in the septenary.

It is true when we speak of the organ we are to understand that there are two kinds of instrument distinguishable by that name; the one, for the smallness of its size, and simplicity of its construction, called the *Portative*, the other the *Positive*, or immoveable organ; both of these are very accurately described by *Ottomar Luscinius*, in his *Musurgia*, printed at Strasburg, in 1536. As to the first, its use was principally to assist the voice in ascertaining the several sounds contained in the system, and occasionally to facilitate the learning of any *Cantus*. The other is that noble instrument, to the harmony whereof the solemn choral service has ever since its invention been sung, and which is now degraded to the accompaniment of discordant voices in the promiscuous performance of metrical psalmody in parochial worship.

Guido might possibly mean that the former of these was proper to tune the voice by; but he goes on farther, and speaks of the organ in general terms, as an instrument to which the hymns, antiphons, and other offices were daily sung in cathedral and conventual churches, and other places of religious worship. Now let him mean either the one or the other of the above-mentioned instruments, it is scarce credible that during so long a period as that between 800 and 1020, during all which the world was in possession of the organ, neither curiosity nor accident should lead to the discovery of music in consonance. Is it to be supposed that this noble instrument, so constructed as to produce the greatest variety of harmony and fine modulation, was played on by one finger only? was the organist, who must be supposed to be well skilled in the nature of consonance, never tempted by curiosity to try its effect on the instrument the object of his studies, and perhaps the only one, if we except the harp, then known, on which an experiment of this kind could possibly be made? did no accident or mistake, or lastly, did not the mere tuning the instrument from time to time, as occasion required, or, if that was not his duty, the bare trying if it were in tune or no, teach him experimentally that the diatessaron, diapente, and diapasos, to say nothing of the other consonances, are as grateful to the audible as their harmonical coincidences are, to the reasoning faculties?

Perhaps it may be objected that this argument will carry the use of symphonic music back to those times in which it is asserted no such thing was known; for it may be asked, does not the hydraulic organ mentioned by *Vitruvius* as necessarily presuppose music in consonance, as that in use at the time of *Guido's* writing the *Micrologus*? In answer to this it is said, that the hydraulic organ is an instrument so very ill defined, that we are incapable of forming to ourselves any idea of its frame, its construction, or its use. *Kircher* has wrested *Vitruvius's* description of it, so as to make it resemble the modern organ, and has even exhibited the form of it in the

Musurgia; but who does not see that the instrument thus accurately delineated by him is a creature of his own imagination? and does he not deny its aptitude for symphonic music by saying as he does in the strongest and most express terms, that after a most painful and laborious research he had never been able to find the slightest vestiges of symphonic harmony in either the theory or practice of the ancients?

CHAP. LI.

It now remains to take a view of music as it stood immediately after this last improvement of *Guido*. *Descant*, in the original sense of the word, was extemporaneous song, a mere energy; for as soon as uttered it was lost: it no where appears that before the time of *Guido* any method of notation had been thought of, capable of fixing it, or that the stave of eight lines, mentioned by *Vincenzio Galilei*, or that other of *Kircher*, on both which the points were situated on the lines, and not in the spaces, was ever used for the notation of more than the simple melody of one part; whereas the stave of *Guido*, wherein the spaces were rendered as useful as the lines, not only brought the melody into a narrower compass, but for the purpose of singing written descant enabled him, by means of the cliffs, to separate and so discriminate the several parts, as to make the practice of music in consonance, a matter of small difficulty.

The word *Score* is of modern invention, and it is not easy to find a synonyma to it in the monkish writers on music: nevertheless the method of writing in score must have been practised as well with them as by us, since no man could know what he was about, that in framing a *Cantus* did not dispose the several parts regularly, the lowest at bottom, and the others in due order above it. In *Guido's* time there was no diversity in the length of the notes, the necessary consequence whereof was, that the points in each stave were placed in opposition to those in the others; and a *cantus* thus framed was no less properly than emphatically called *Counterpoint*.

It is needless to say that before the invention of the *Cantus Mensurabilis* this was the only kind of music in consonance; where it was adapted to words the metre was regulated by the cadence of the syllables, and where it was calculated solely for instruments, the notes in opposition were of equal length, adjusted by the simple radical measures, out of which all the different modifications of common and triple time, as we now call them, are known to spring. But this kind of equality subsisted only between the integral parts of the *Cantus*, as they stood opposed to each other in consonance, and the radical measures were not less obvious then than they are now. The whole of the *Rythmopoiesis* was founded in the distinction between long and short quantities, and a foot, consisting solely of either, is essentially different from one in which they are combined; in one case the *Arsis* and *Thesis* are equal; in the other they have a ratio of two to one. From hence there is reason to conclude that the

primitive counterpoint, as being subject to different general measures, was of two forms, answering precisely to the common and triple time of the moderna. The former of these may thus be conceived of:—



And the latter thus:—

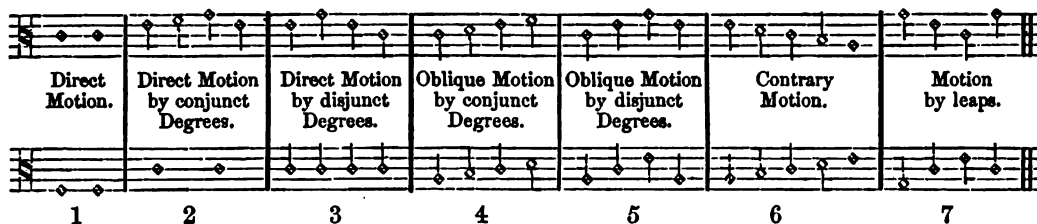


But although these were all the varieties in respect to time or measure, which it was originally capable

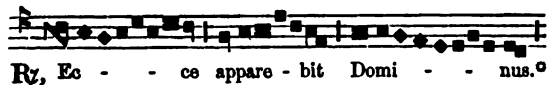
of, counterpoint was even then susceptible of various forms, and admitted of an almost endless diversity of combinations, arising as well from a difference in the motion or progression of the sounds, as in the succession of consonances. The combinations, in a series of those eight sounds which constitute the diapason, are estimated at no fewer than 40,320. And in the case of a cantus in consonance these allow of a multiplication by the number of the additional parts to the amount of four. Hence it is that in a cantus thus constituted, the iteration of the same precise melody and harmony is an event so extremely fortuitous, that we estimate the chance of its happening, at nothing.

Another source of variety is discernible in the different motions which may be assigned to the several parts of a cantus in consonance, which, as they stand opposed to each other, may be in either of the following forms:—

VARIOUS PROCESSES OF HARMONY.



These observations may serve as a general explanation of the nature of counterpoint, of which it will appear there are several kinds; for the thorough understanding whereof it is necessary to be remembered that the basis of all counterpoint is simple melody, to which the concords placed in the order of point against point are but auxiliary. The foundation on which the harmonical superstructure is erected is termed by the ancient Italian writers *Canto Fermo*, of which the following is an example:—



As to counterpoint, notwithstanding the several divisions of it into *Contrapunctus simplex*, *Contrapunctus diminutus sive floridus*, *Contrapunctus coloratus*, *Contrapunctus fugatus*, and many other kinds, it is in truth that species of harmony only, in which the notes contained in the *Canto Fermo*, and each of the other parts, are of equal lengths, as here:—

CONTRAPUNCTUS SIMPLEX.



* From a MS. cited by Martini, supposed to have been written in the thirteenth century. *Storia della Musica*, tom. I. pag. 187.

This kind of symphoniac harmony was doubtless very grateful to the hearers as long as it retained the charm of novelty, and when adapted to words, was not liable to any objection arising from its want of metrical variety; but in music merely instrumental, the uniformity of its cadence, and the unvaried iteration of the same measures, could not at length fail to produce satiety and disgust. For it is not in the bare affinity or congruity of sounds, though ever so well adjusted, combined, or uttered, that the ear can long find satisfaction: this is experienced by those who study that branch of musical science known by the name of continued or thorough bass, the private practice whereof, whether it be on the organ, harpsichord, arch-lute, or any other instrument adapted for the purpose, in a short time becomes irksome. But the invention of the different measures for time, together with the pauses or rests, and also of the ligatures, gave rise to another species, in which the rigorous opposition of point to point was dispensed with; and this relaxation of a rule which, while it was observed, held the invention in fetters, gave rise to those other species of harmony above-mentioned, improperly called counterpoint.

The *Contrapunctus diminutus* was evidently the first improvement of the *Contrapunctus simplex*, in which it is observable that the notes opposed in the *Canto Fermo* are more in number, and consequently less in value, than the latter of this species. The following, though not a very ancient composition, may serve as an example:—

CONTRAPUNCTUS DIMINUTUS sive FLORIDUS.



This was followed by the introduction of little points, imitations, colligations of notes, and responsive passages, not so elegant in their structure and contrivance as, but somewhat resembling, the fugue of modern times.

The rudiments of this species are discernible in the following Kyrie, said to have been composed about the year 1473 :—*

CANTO FIGURATO.



To this latter kind of music were given the epithets of Figurate, Coloured, and many others of the like import. The Italians to this day call it Canto Figurato, and oppose it to Contrapunto or counterpoint. Other countries have relaxed the signification of the word Descant, and have given that name to counterpoint; and the two kinds are now distinguished by the appellations of Plain and Figurate descant.

From hence it appears that the word Descant, considered as a noun, has acquired a secondary signification; and that it is now used to denote any kind of musical composition of more parts than one; and as to the verb formed from it, it has, like many others, acquired a metaphorical sense, as in the following passage :—

'And Descant on mine own deformity.'

Shakespeare, Rich. III.

But neither can its original meaning be understood, nor the propriety and elegance of the above figure be discerned, without a clear and precise idea of the nature of descant, properly so called.

If we compute the distance in respect of time between the last improvement of the Cantus Ecclesiasticus by St. Gregory, and the invention of the Cantus Mensurabilis by Franco, it will be found to include nearly five hundred years; and although that period produced a great number of writers on the subject of music whose names and works have herein

before been mentioned in chronological order, it does not appear that the least effort was made by any of them towards such an improvement as that of Franco, which is the more to be wondered at as the ratio of accents, which is what we are to understand by the term Prosody, was understood to a tolerable degree of exactness, even after the general declension of literature; and long before the commencement of that period was deemed, as it is now, a necessary part of grammar. St. Austin has written a treatise on the various measures of the ancient verse, and our countryman Bede has written a discourse *De Metrica Ratione*; but it seems that neither of them ever thought of applying the ratio of long and short measures to music, abstracted from verse.

Neither can it be reasonably inferred from any thing that Isaac Vossius has said in his treatise *De Poematum Cantu et Viribus Rythmi*, admitting all that he has advanced in it to be true, that the Rythmopoieia of the ancients had any immediate relation to Music: it should rather seem by his own testimony to refer solely to the Poetry of the ancients, and to be as much a branch of grammar as prosody is at this day. This however is certain that the ancient method of notation appears to be calculated for no other end than barely to signify the diversities of sounds in respect of their acuteness and gravity. Nor do any of the fragments of ancient music now extant:

* Martini, *Storia della Musica*, tom. I. pag. 188.

furnish any means of ascertaining the respective lengths of the sounds, other than the metre of the verses to which they are adapted. It may perhaps be urged as a reason for the practice of adjusting the measures of the music by those of the verse, rather than the measures of the verse by those of the music, that the distinction of long and short times or quantities could not with propriety be referred to music: but this is to suppose that music merely instrumental has no force or efficacy save what arises from affinity of sound; the contrary whereof is at this day so manifest, that it would be ridiculous to question it: nay the strokes on an anvil have a metrical ratio, and the most uniform monotony may be so broken into various quantities, and these may again be so combined as to form a distinct species capable of producing wonderful effects.

If this should be doubted, let it be considered that the Drum, which has no other claim to a place among the pulsatile musical instruments, than that it is capable of expressing the various measures and modifications of time, owes all its energy to that which in poetry would be called Metre, which is nothing more than a regular and orderly commixture of long and short quantities; but who can hear these uttered by the instrument now speaking of, who can attend to that artful interchange of measures, which it is calculated to express, and that in a regular subjection to metrical laws, without feeling that he is acted upon like a mere machine?

With the utmost propriety therefore does our great dramatic poet style this instrument the Spirit-stirring drum; and with no less policy do those act who trust to its efficacy in the hour of battle, and use it as the means of exciting that passion which the most eloquent oration imaginable would fail to inspire.*

* It seems that the old English march of the foot was formerly in high estimation, as well abroad as with us; its characteristic is dignity and gravity, in which respect it differs greatly from the French, which, as it is given by Merennus, is brisk and alert. Sir Roger Williams, a gallant Low-country soldier of queen Elizabeth's time, and who has therefore a place among the worthies of Lloyd and Winstanley, had once a conversation on this subject with marshal Biron, a French general. The marshal observed that the English march being beaten by the drum was slow, heavy, and sluggish: 'That may be true,' answered Sir Roger, 'but slow as it is, it has traversed your master's country from one end to the other.' This bon mot is recorded in one of those little entertaining books, written by Crouch the bookseller in the Poultry, and published about the end of the last century, under the fictitious name of Robert Burton; the book here referred to is entitled *Admirable Curiosities, Rarities, and Wonders in England, Scotland, and Ireland*; the story is to be met with in pag. 5, of it, but where else is not said.

Notwithstanding the many late alterations in the discipline and exercise of our troops, and the introduction of fifes and other instruments into our martial music, it is said that the old English march is still in use with the foot. Mr. Walpole has been very happy in discovering a manuscript on parchment, purporting to be a warrant of Charles I., directing the revival of the march agreeably to the form thereto subjoined in musical notes signed by his majesty, and countersigned by the earl of Arundel and Surrey, the then earl marshal. This curious manuscript was found by the present earl of Huntingdon in an old chest, and as the parchment has at one corner the arms of his lordship's predecessor, then living, Mr. Walpole thinks it probable that the order was sent to all lords lieutenants of counties.

The following is a copy of the warrant, and of the musical notes of the march, taken from the Catalogue of Royal and Noble Authors, vol. I. pag. 201:—

CHARLES REX,

'Whereas the ancient customs of nations hath ever bene to use one certaine and constant forme of march in the warres, whereby to be distinguished one from another. And the march of this our English nation, so famous in all the honourable achievements and glorious warres of this our kingdome in forraigne parts [being by the approbation of strangers themselves confest and acknowledged the best of all marches] was through the negligence and carelessness of drummers, and by long discontinuance so altered and changed from the ancient gravitie and majestie thereof, as it was in danger utterly to have bene

It may be remembered that in the foregoing deduction of the improvements made in music, counterpoint was mentioned as the last that preceded the invention of the Cantus Mensurabilis. To shew the importance of this last, it was necessary to state the defects in that species of harmony which admitted of no metrical variety. It was also necessary in the next place to shew that although the Rythmopoieia of the ancients has long ceased to be understood, yet that the rudiments of it subsist even now in the prosody of the grammarians. Seeing then that the art of combining long and short quantities, and the subjecting them to metrical laws was at all times known, it may be asked wherein did the merit of Franco's invention consist? The answer is, in the transferring of metre from poetry or verse to mere sound; and in the invention of a system of notation, by means whereof all the possible modifications of time are definable, and that to the utmost degree of exactness.

But the merit of Franco's invention, and the subsequent improvement of it by De Muris and other writers, are best to be judged of by their consequences, which were the union of the Melopoieia with the Rythmopoieia, or, in other words, Melody and Metre; and from hence sprang all those various species of counterpoint, which are included under the general

'lost and forgotten. It pleased our late deare brother prince Henry to revive and rectifie the same by ordaining an establishment of one certaine measure, which was beaten in his presence at Greenwich, anno 1610. In confirmation whereof wee are graciously pleased, at the instance and humble sute of our right trusty and right well-beloved cousin and counsellor Edward viscount Wimbledon, to set down and ordaine this present establishment hereunder expressed. Willing and commanding all drummers within our kingdome of England and principalltie of Wales exactly and precisely to observe the same, as well in this our kingdome, as abroad in the service of any forraigne prince or state, without any addition or alteration whatsoever. To the end that so ancient, famous, and commendable a custome may be preserved as a paterne and precedent to all posteritie. Given at our palace of Westminster the seventh day of February, in the seventh years of our raigne, of England, Scotland, France, and Ireland.

VOLUNTARY before the MARCH.

Pou tou pou tou pou R pou tou pou pou pou pou R poung.

The MARCH.

Pou tou Pou tou poung.

Pou tou Pou R poung.

R pou tou R poung.

R R pou R poung.

R R pou tou R pou tou pou R tou pou R poung.

R R R poung.

R R R pou R R pou tou pou R tou pou R poung potang.

'Subscribed ARUNDELL & SURREY.

'This is a true copie of the original, signed by his Majestie
'ED. NORGATE, Windsor.

appellation of *Canto Figurato*. The first and most obvious improvement of counterpoint, which, as has been already shewn, was originally simple, and consisted in a strict opposition of note to note, is visible in that which is termed *Contrapunctus iminutus sive floridus*, wherein the notes in one part, the plain-song for instance, are opposed by others of a less value, but corresponding to the former in the general measure of its constituent sounds, of which kind of composition an example has herein before been given. The subsequent improvements on this invention have been shewn to be, the *Canto Figurato*, Canon, and other kinds of symphoniacal composition, all which are evidently the offspring of the *Cantus Mensurabilis*, an invention so much the more to be valued, as it has rendered that fund of harmonical and metrical combination almost infinite in its extent, which else must long ago have been exhausted.

If we take a view of music in the state in which Guido left it, it will be found to have derived all its power and efficacy from the coincidence of sounds, and that those sounds being regulated by even and uniform measures, though they might be grateful to the ear, which is delighted with harmony even in cases where it refers to nothing beyond itself, must necessarily fail of producing those effects which follow from their being subjected to metrical regulations.

Proofs abundant of these effects might be adduced from the compositions of the last century, as namely, Carissimi, Stradella, Gasparini, and others of the Italians, and our own Purcell, but were these wanting, and no evidence subsisted of the benefits which have resulted to music from the union of harmony and metre, those of Handel are an irrefragable testimony of the fact, the force and energy of whose most studied works is resolvable into a judicious selection of measures calculated to sooth or animate, to attemper or inflame, in short to do with the human mind whatever he meant to do.

Having thus explained the nature of the *Cantus Mensurabilis*, and also of Descant, the knowledge whereof is absolutely necessary to the understanding the writers who succeeded John De Muris, it remains to give an account of a number of valuable tracts, composed, as it is conceived, subsequent to the time when he lived and of the final establishment of an harmonical and metrical theory by Franchinus.

Mention has been made in the course of this work of a manuscript, to which, for the want of another title, that of the Cotton MS. has been given, and also of another, for distinction-sake called the manuscript of Waltham Holy Cross. The former of these is now rendered useless by the fire that happened at Ashburnham-house. But before this disastrous event a copy thereof, not so complete as could be wished, as wanting many of the diagrams and examples in notes occasionally inserted by way of illustration, had been procured and made at the expense of the late Dr. Pepusch. As to the other manuscript, that of Waltham Holy Cross, it formerly belonged to some person who was so much a friend to learning as to oblige Dr. Pepusch with permission to copy it, and his copy thereof is extant. The original is now

the property of Mr. West, the president of the Royal Society, who, actuated by the same generous spirit as the former owner, has vouchsafed the use of it for the furtherance of this work. These assistances afford the means of giving an account of a number of curious tracts on the subject of music, which hardly any of the writers on that science seem ever to have seen, and which perhaps are now no where else to be found.

The first of these manuscripts contains tracts by different authors, most of whom seem to have been well skilled in the less abstruse parts of the science. The compiler of this work is unknown, but the time when it was completed appears by the following note at the conclusion of the first tract :—

‘Finito libro reddatur gloria Christo. Expliciunt ‘Regulæ cum additionibus: finitæ die Veneris proximo ‘ante Pentecost, anno domini millesimo tricentesimo ‘vicesimo sexto, et cætera, Amen.’

Of the first tract, which bears the title of ‘Regulæ ‘cum maximis magistri Franconis, cum additionibus aliorum Musicorum, compilatæ à Roberto de ‘Handlo,’ some mention has already been made; and as to Franco, the author of the Rules and Maxims, an account of him, of his country, and the age in which he lived, has also been given.* Of his commentator De Handlo, bishop Tanner has taken some notice in his *Bibliotheca*; but as his account refers solely to the manuscript now before us, the original whereof it is probable he had seen, it seems that he was unable to say more of him than appears upon the face of this his work.

As to the commentary, it is written in dialogue; the speakers are Franco himself and De Handlo, and other occasional interlocutors. The subject of it is the art of denoting the time or duration of musical sounds by characters, and there is little reason to doubt but that it contains the substance of what Johannes De Muris taught concerning that matter. It consists of thirteen divisions or Rubrics, as the author terms them, from their being in red characters, the titles whereof with the substance of each are as follow :—

Rubric I. Of the Long, Breve, and Semibreve, and of the manner of dividing them.

Rubric II. Of the Long, the Semi-long,† and their value, and of the Double Long.

Rubric III. How to distinguish the Long from the Semi-long, and the Breve from the Semibreve; and of the Pauses corresponding with each; and of the equality of the Breve and the Breve altera.

Rubric IV. Of Semibreves, and their equality and inequality, and of the division of the Modes [of time] and how many ought to be assumed.

Under this head the author mentions one Petrus De Cruce as a composer of motetts; the names of Petrus Le Visor, and Johannes De Garlandia also occur as interlocutors in the dialogue.

* Supra, pag. 176, to which may be added that in the Index of Authors, at the end of Martini's first volume, is the following article: ‘FRANCUS Parisiensis. Ars Cantus Mensurabilis. Codex Ambrosianus ‘signat D. 5, in fol.’ which is probably no other than a copy of the tracts there ascribed to him.

† This is but another name for the breve.

Rubric V. Of the Longs which exceed in value a double Long.

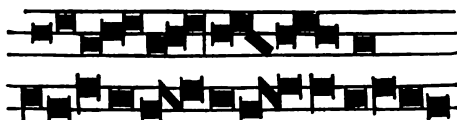
This rubric exhibits a species of notation unknown to us at this day, namely, a single character encreased in its value by the encrease of its magnitude. A practice which will be best understood from the author's own words, which are these:—‘A figure having three quadrangles in it is called a triple long, that is to say a note of three perfections; if it has four, it is called quadruple, that is a note of four perfections; and so on to nine, but no farther. See the figures of all the longs as they appear here:—



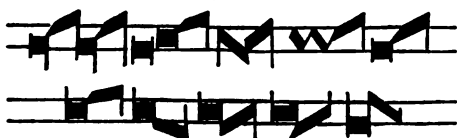
Rubric VI. Of the beginnings of Ligatures and Obliquities, and in what manner they are found.

A Ligature is here defined to be a mass of figures, either in a right or an oblique direction; and an Obliquity is said to be a solid union or connexion of two ascending or descending notes in one. Here follow examples, from the author, of each:—

LIGATURES.



OBLIQUITIES.



Of ligatures, and also of obliquities, some are here said to be with propriety, others without propriety, and others with an opposite propriety; these species are severally known by their beginnings. The matter of this rubric, and the commentary on it are of very little import.

It is farther said that no additional mark or character is to be made at the end of an ascending obliquity, except a Plica, a word which in this place signifies that perpendicular stroke which is the termination of such characters as the long.

Rubric VII. To know the terminations of the ligatures. The beginnings and terminations of ligatures, and also of obliquities, declare the nature of the time, whether it be perfect or imperfect; or, as we should now say, duple or triple.

Rubric VIII. Teaches also to know the terminations of the ligatures.

Rubric IX. Concerning the Conjunctions of semibreves, and of the figures or ligatures with which such semibreves may be joined.

Here we meet with the name of Admetus de Aureliana, who, as also the singers of Navernia, the name of a country which puzzled Morley, and which probably means Navarre, are said to have conjoined Minoratas and Minims together.

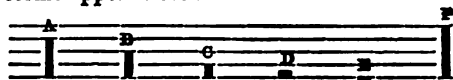
Rubric X. How the Plicas are formed in ligatures

and obliquities, and in what manner a plicated long becomes an erect long.

Rubric XI. Concerning the value of the Plicas.

Rubric XII. Concerning the Pauses.

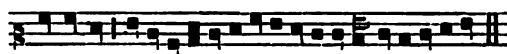
The pauses are here said to be six in number, the first of three times, the second of two, and the third of one. The fourth is of two third parts, and the fifth one third part of one time. As to the sixth it is said to be of no time, and that it is better called an immeasurable pause, and that the use of it is to shew that the last note but one must be held out, although but a breve or semibreve. The characters of the pauses are also thus described: a pause of three times covers three spaces, or the value of three, namely, two and two halves, A; a pause of two times covers two spaces or one entire space, and two halves, B; a pause of one time covers one space or two halves, C; a pause of two perfections of one time covers only two parts of one time, D; a pause of the third part of one time covers the third part of one space E; a pause, which is said to be immeasurable F, is called the end of the punctums, and covers four spaces, their five forms appear here:—



In this rubric the colloquium is between Franco, Jacobus de Navernia, and the above-named Johannes de Garlandia.

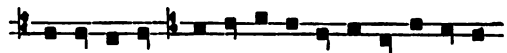
Rubric XIII. How the Measures or Modes of time are formed.

Here it is laid down that there are five modes of time used by the moderns, the first consisting of all perfect longs, as the following motet:—

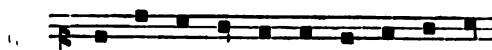


In Bethleem

The second mode consists of a breve, a long, and a breve, as in this example:—



The third of a long, two breves and a long, as in this motet: only it is to be observed that to this mode belongs a pause of three times, a long going before:—



Quid mi-ra-ris par-tum vir-gi-ne-um.

The fourth mode is of two breves, a long, and two breves, as here:—



Ro-su-la primu-la sal-ve Jes-so vir-gu-la.

and to it belongs a pause of three times. After this designation of the fourth mode there occurs a caution, which will doubtless appear somewhat singular, namely, that care must be taken that in the singing the notes be not expressed in a lascivious manner. The fifth mode consists of breves and semibreves of

both kinds, that is to say, perfect and imperfect, as appears in the following example :—



From this mode, it is said, proceed a great number of melodies or airs, the names whereof can scarcely be rendered in English, as namely, Hockets, * Rundelli, Balladea, Coreæ, Cantusfracti, Estampetæ, Florituræ. It seems that these five modes may be mixed or used interchangeably, in which respect they agree with the modes in use at this day. The whole of the explanation of this last rubric comes from the mouth of De Handlo, the author of the tract, which he concludes with words to this purpose : 'Every mode of measures, and every measure of cantus is included in the above five modes and rules, and maxims for their use and application might be given without end ; nevertheless attend to the instructions contained in this small volume. All that now hear me are singers, therefore pray fervently to God for the life of the writer. Amen.'

CHAP. LII.

To the tract of De Handlo, the next in order that occurs is a discourse by an anonymous author, entitled 'Tractatus diversarum Figurarum per quas dulcis Modis discantantur,'† to appearance a compendium of the doctrine of De Muris, containing in the beginning of it a remarkable eulogium on him by the name of Egidius de Muris, or de Morino, viz., that he, as it pleased God, most carefully, and to his great glory, searched into and improved the musical art. So that the characters, namely, the double Long ≡, Long ≡, Breve ≡, Semibreve ≡, Minim ↓ are now made manifest.

Herein also are treated of the pauses or rests, which, as well as the characters to denote the length or duration of the several notes, are said to be of his invention ; also of the several methods of augmentation in the value of the notes by a point, and diminution by a variation of the character in respect of colour, that is to say, either by making it black or red, full or void, or by making it with a tail or without, are here enumerated. Next follow certain precepts, tending to facilitate the practice of descant, whereby it appears that the tenor in one mode

* An explanation of this strange word will be met with in a subsequent page.

† This tract contains most evidently a summary of the improvements of De Muris on the Cantus Mensurabilis, but by an unaccountable mistake he is here called Egidius instead of Johannes, a name which does not once occur in any of the authors that have been consulted in the course of this work. We must therefore look on the character above given of Giles, to be intended for John, De Muris. It seems that Mr. Caaley, by a mistake of a different kind, looked upon this tract as having been written by Giles De Muris. See his Catalogue, pag. 320 ; but Dr. Pepusch's copy, for the original has been resorted to and appears to be not legible, contains the following rubric title of the tract in question : 'Alius Tractatus de Musica incerto Authore.'

of measure or time, the descant may be another ; this may be conceived, if it be understood that the metres coincide in the general division of them, otherwise it seems to be absolutely impossible.

The use of red characters is but barely hinted at in the tract now citing : indeed the author does no more than intimate that where it is necessary to diminish the value of notes by a third part, making those imperfect which else would be perfect, it may be done either by evacuating them, or making them red, 'when the writer has wherewithal to do so.'

This kind of alteration in the value by a change in the colour of notes, occurs frequently in old compositions, and is mentioned by most authors, who when they speak of the diversity of colours mention black full and black void, and red full and red void : Nevertheless in a very curious ancient poem, entitled A Treatise between Truth and Information, printed at the end of Skelton's works, there is the following passage, whereby it may seem that Vert or Green, was also used among musicians to note a diversity of character :—

In musyke I have lerned iiiii colors as this,
Blake, ful blake, Verte, and in lykewyse redde ;
By these colors many fubtill alteracions there is,
That wil begile one tho in conyng he be well sped.

The author of this poem was William Cornysh, of the royal chapel in the reign of Henry VII., a man so eminent for his skill in music, that Morley has assigned him a place in his catalogue of English musicians, an honour, which, to judge of him by many of his compositions now extant, he seems to have well deserved ; and these considerations do naturally induce a suspicion, if not a belief, that notwithstanding the silence of other writers in this respect, Green characters might sometimes be made use of in musical notation.

But a little reflection on the passage will suggest an emendation that renders it consistent with what others have said on the subject. In short, if we read and point it thus :—

In musyke I have lerned iiiii colors ; as this,
Blake ful, blake void, and in lykewife redde,

it is perfectly intelligible and is sound musical doctrine.

The next in order of the tracts contained in the Cotton manuscript is a very copious, elaborate, and methodical discourse on the science of music in general, by an unknown author. The initial words of it are 'Pro aliquali notitia de musica habenda : ' it begins with the etymology of the word music, which he says is derived either from the Muses, or from the Greek word Moys, signifying water, because without water or moisture no sweetness of sound can subsist.‡ Boetius's division of music into mun-

‡ That there is such a Greek word as Moys does not any where appear. Kircher, who adopts this far-fetched etymology of the word Music, says that it is an Hebrew appellation, Musurg. tom. I. pag. 44., but in this he elsewhere contradicts himself, by asserting that it is an ancient Egyptian or Coptic word ; and this is rather to be credited because it is said in scripture that Moses, or as he is also called, Moyses, was so named because he was taken out of the water. Exod. chap. ii. ver. 10., and it is remarkable that this name was given him, not by his Hebrew parents, but by Pharaoh's daughter, an Egyptian princess.

The meaning of the above passage is very obscure, unless it be known that the ancient Egyptian ltrul or pipes were made of the reeds and papyrus growing on the banks of the river Nile, or in other marshy places ; wherefore it is said that without water, the efficient cause of

dane, humane, and instrumental, is here adopted. The first, says this author, results from the orderly effects of the elements, the seasons, and the planets. The second is evident in the constitution and union of the soul and body. And the third is produced by the human voice, or the action of human organs on certain instruments. He next proceeds to give directions for the making of a monochord, which as they differ but little from those of Guido, it is not necessary here to repeat. It is however worth observing, that he recommends for that purpose some instrument emitting sound as a Viol [Vielle, Fr.] a circumstance that in some sort ascertains the antiquity of that instrument, of which there are now so many species, and which is probably of French invention.

He next proceeds to explain the nature of the consonances, in which it is evident that he follows Boetius. Indeed we may conclude that his intelligence is derived from the Latin writers only, and not from the Greeks; not only because the Greek language was very little understood, even among the learned of those times, but also because this author himself has shewn his ignorance of it in a definition given by him of the word Ditone, which says he, is compounded of Dia, a word signifying Two, and Tonos, a Tone, whereas it is well known that it is a composition of Dis, twice, and Tonas; and that the Greek preposition Dia, answers to the English by, wherefore we say Diapason, by all; Diapente, by five; Diatessaron, by four.

After ascertaining the difference between *b* and *H*, he proceeds to a brief explication of the genera of the ancients, the characters of the three he thus discriminates: the Chromatic as soft, and conducing to lasciviousness; the Enarmonic as hard and disgusting; and the Diatonic as modest and natural; and it is to this genus that the division of the monochord by tones and semitones is adapted.

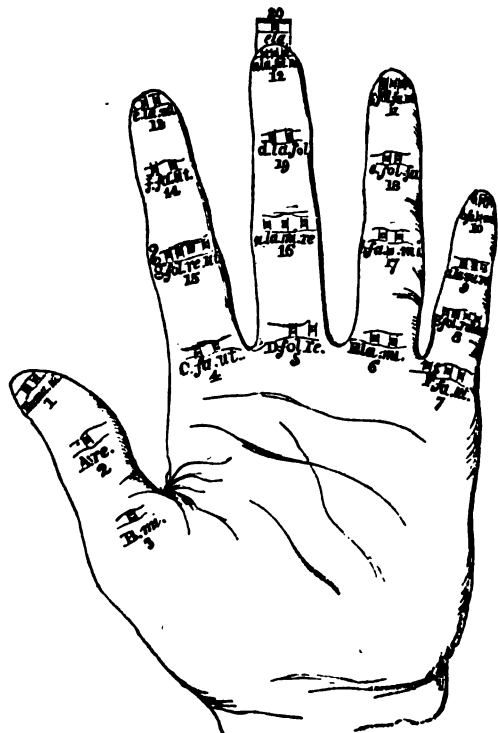
What immediately follows seems to be little less than an abridgement of Boetius, whose work *De Musica*, the author seems to have studied very diligently.

In the next place he treats of the plain cantus as distinguished from the Cantus Mensurabilis, which he makes to consist of five parts, namely, first the Characters, with their names; second, the Lines and spaces; third, the Properties; fourth, the Mutations; and fifth, the eight Tropes or Modes. As to the first, he says they are no other than the seven Latin letters A, B, C, D, E, F, G, which also are called Keys, because as a key opens a lock, these open the melody of music, although *Gamma* Greek is placed before A, to signify that music was invented by the Greeks. He then relates, that six names for the notes were given by Guido to these seven letters, *UT*, *RE*, *MI*, *FA*, *SOL*, *LA*; and that he placed a tone between *UT* and *RE*, a semitone between *MI* and *FA*, a tone between *FA* and *SOL*, and a tone between *SOL* and *LA*, that the

music, there can be no sweetness of sound. Martini, Stor. dell. Mus. tom. II. pag. 2, very justly remarks on the credulity of Kircher in entertaining this wild and extravagant conjecture. The most probable derivation of the word music is from *Musæ* the Muses, who are said to have excelled in it, and are constantly represented playing on musical instruments.

progression might be according to the diatonic genus. But because there are more letters used in the division of the monochord than there are notes or syllables; for no one can ascend above *LA*, nor descend below *UT*, without a repetition of the syllables, seven deductions were constituted, which appoint the place of the syllable *UT*, and direct the application of the rest in an orderly succession. The place of *UT* is either at C, F, or g; the deductions he says might be infinitely multiplied, but seven are sufficient for the human voice. It is well known that every repetition of the letters in the musical scale is signified by a change, not of the letter, but of the character; for this reason the author of the tract now before us observes, that immediately after C we are to take the smaller Roman letters; and in the third series we are to use other characters having the same powers; we now double the former thus *aa*, *bb*, *hh*, *cc*, *dd*, *ee*, but he has chosen to express them by Gothic characters. The first series are termed Graves, the second Acutes, and the last Supracutes.

Having thus explained the names and characters of the musical notes, the author proceeds to shew the use of the lines and spaces, which he does in very few words; but as sufficient has been said on that subject by Guido himself, and the substance of his doctrine is contained in an abstract of his own work herein-before given, what this author has said upon it is here purposely omitted. He mentions, though without ascribing it to Guido, the invention of the hand for the instruction of boys, and, taking the left for an example, he directs the placing *UT* at the end of the thumb, and the other notes in the places following:—



He next proceeds to treat of the Proprieties, meaning thereby not those of the Cantus Mensuralis, but of the Monochord; and these he defines to be certain affections, from which every cantus takes the denomination of Hard or Soft, according as it is determined by one or other of these characters **h**, or **b**; or Natural, which is when the Cantus is contained within such a limit, namely, that of a hexachord, as that neither the **h** hard, nor **b** soft, can possibly occur: to render this intelligible he adds, that every cantus which begins in **b** is by sung by **h** hard in **F**, by **b** soft, and in **C** by nature.*

The author then goes on to explain the mutations, which are necessary, when the six syllables are too few to express the whole Cantus ; or, in other words, when the cantus requires a conjunction of another hexachord, by certain diagrams of a circular form, supposed to be taken from a tract intitled *De Quatuor Principalium*, † mentioned in the preceding note, and which diagrams, to the number of nineteen, Morley has given with his own improvements ; but the whole is a poor contrivance, and so much inferior to that most ingenious one, representing the three hexa-

* To explain this matter a little more fully, we must borrow the assistance of our countryman Morley, who in the instructions to Philomathes, his imaginary pupil, tells him that 'there be three principal keys, containing the three natures or properties of singing.' Which position of his occasions the following short dialogue:—

***PMI.** Which be the three properties of singing? **MAST.** b Quarre, b
 Quarre, and b Molle. **PMI.** What is b Quarre? **MAST.** It is a
 property of singing wherein **MI** is always sung in b **FA** **h** **MI**, and is
 always when you sing ut in gamut. **PMI.** What is Procherant? **MAST.**
 It is a property of singing wherein you may sing either **FA** or
MI, in b **FA** **h** **MI**, according as it shall be marked b or thus, **h**, and is
 when the **UT** is in **CFA** **UT**. **PMI.** What if there be no marker? **MAST.**
 There it is supposed to be sharpe **h**. **PMI.** What is b Molle? **MAST.** It
 is a property of singing, wherein **FA** must always be sung in b **FA** **h**
MI, and is when the **UT** is in **FFA** **UT**.

Upon this passage the following is the note of the author:—

"A propertie of singing is nothing else but the difference of plain-songs caused by the note in b FA & MI having the halfe note either above or below it. And it may plainly be seen that those three properties have not bin devised for prickt-song; for you shal find no song included in so smal bounds as to touch no b. And therefore these plain songs which were so contained were called naturall, because every key of their six notes stood invariable the one to the other, howsoever the notes were named; as from d sol RE to e LA MI, was always a whole note, whether one did sing sol LA, or RE MI, and so-forth of others. If the b had the semitonium under it, then was it noted b, and was termed b molle or soft; if above it, then was it noted thus \flat , and termed b Quadratum, or b quarre. In an olde treatise, called Tractatus quatuor Principallium, I find these rules and verses, 'Omne ut Inclinat in C' quatuor ut naturum. In F per b molle. In g per b quadratum,' that is every ut beginning in C is sung by properchant, in F by b molle or flat; in g by the square \flat or sharpe. The verses in these

"C. naturum dat F b molle nunc tibi signat, g quoque
"b durum tu semper habes caniturum.

"Which if they were no truer in substance than they be fine in words,
"and right in quantitle of syllables, were not much worth."

↑ This tract, the title whereof is Quatuor, Principalia Artis Musicae, and, as this is elsewhere described, De quatuor Principis Artis Musicae, is by Wood, Hist. et. Antiq. Oxon. il. 5, and in the Oxford Catalogue of Manuscripts, ascribed to one Thomas Teuksbury, a Franciscan of Bristol; for what reason bishop Tanner says he does not clearly see; but upon looking into the manuscript, there appears at least a colour for Wood's assertion, for the name Tho. de Tewkesbury is written on the outer leaf of it. It is true, as Tanner says, Biblioth. pag. 707, the name Johannes de Tewkesbury is written on a loose leaf; but it is manifest that he was not the author of it, and no such person as Johannes de Tewkesbury occurs in any of the catalogues of the old English musicians; besides this, in the Catalogue of the Bodleian manuscripts, the tract above-mentioned is ascribed to Tho. de Teuksbury. Nevertheless bishop Tanner asserts that it was written by one John Hamboys, an eminent musician, and a doctor in that faculty, who flourished about the year 1476, and is mentioned by him among the famous writers of Edward the Fourth's time. The reason he gives for this is, that he appears from Pitts, pag. 662, that Hamboys was the author of a work entitled Summum Artis Musicae, the initial sentence whereof, as Tanner reports, is this: 'Quesmadmodum inter Tritico,' and the Quatuor Principalia Musicae has precisely the same beginning.

chords, and directing the method of conjoining them in plate IV. at the end of Dr. Pepusch's Short Introduction to Harmony, that the not inserting the circular diagrams in this place will hardly be regretted.

Of the Tropes or Modes, though he includes them in the general division of his subject, the author has said nothing in this place. But he proceeds to an explanation of the nature of mensurable music, which, after Franco, he defines to be a cantus measured by long and short times. In this part of his discourse there will be little need to follow him closely, as a more distinct account of the modes or ecclesiastical tones has already been given from Franchinus.

His first position is that all quantity is either continuous or discrete ; and from hence he takes occasion to observe that the minim is the beginning of measured time, in like manner as unity is the beginning of number ; and adds, that time is as well the measure of a sound prolated or uttered, as of its contrary, a sound omitted.



The comparison which the author makes between the minim and the unit, induces a presumption, to call it no more, that in his time the minim was the smallest quantity in use. But he explains the matter very fully, by asserting that the minim was invented by Philippus de Vitriaco, who he says was a man very famous in his time, and approved of by all the world; and that the semiminim was then also known, though Vitriaco would never make use of it in any of his works, looking upon it as an innovation.

From hence it is manifest, notwithstanding that formal relation to the contrary, which is given by Vicentino, that De Muris was not the inventor of the characters for the lesser quantities from the breve downwards; nay it is most apparent in the rules of Franco, and the commentary thereon by De Handlo, that even the breve was made use of by the former; and it is highly probable that that character, together with the semibreve, for that also is to be found in his rules, was invented by him at the same time with the large and the long.

And here it may not be improper, once for all, to observe, that the necessary consequence of the introduction of these lesser quantities into the *Cantus Mensurabilis* was a diminution in value of the larger and we are expressly told by the author now citing, some pages forwarder in his work, not only that at the time when Franco wrote, to say nothing of the *minim*, neither the imperfect mode, nor the imperfect time were known, but that the *breve* and the *long*, which seem to be put as examples for the rest of the notes, were then pronounced as quick as now they are in the imperfect time, so that the introduction of the imperfect time accelerated the pronunciation of the several notes, by subtracting from each one third part of its value. The invention of the *minim*, and the other subordinate characters, was attended with similar consequences; so that if we measure a time, or, as we now call it, a bar, by pauses, as Franchinus directs, it will be found that in triple, for that is what is to be understood by perfect time, the crotchet has taken the place of the *minim*, which before had

taken place of the semibreve, and so progressively backwards. All which considered, it is clear that though by the invention of the minim, crotchet, quaver, and other notes of a still less value, the modern music is comparatively much more quick than the ancient, the ancient music was not uttered so slowly as the characters, which most frequently occur in it, seem to indicate.

We meet here also with directions concerning the use and application of the Plica, as it is called, which is nothing more than that stroke, which, drawn from the body of a breve, makes it a long, as thus ■■, and is at this day called the tail of a note; but it seems that the due placing this was formerly a matter of some nicety, the reason whereof may be that it prevented confusion among the characters, and that fair, curious, and correct writing was then a matter of more consequence than it has been at any time since the invention of printing, a fact, which all who have been conversant with manuscripts, or have been accustomed to the perusal of ancient deeds or charters, well know to be true.

Franco's definition of the Plica is, that it is a mark of distinction between a grave and an acute character ; but surely the best distinction of a character in this respect is its situation in the stave. Others term it an Inflexion of a note ; but neither is this an adequate definition, nor indeed does the subject seem to be worth one ; all that need here be said about it is, that ascending, the Plica of the long was drawn upwards on the right side of the note thus , descending, it was drawn downwards thus .

Our author next proceeds to a description of the ligatures, taking notice of that threefold distinction of them into those with Propriety, those without Propriety, and those with an opposite Propriety, the nature of which division is explained by Robert De Handlo, adding, as his own judgment, that every descending ligature having a stroke descending from the left side of the first note, is said to be with Propriety, if the ligature has no stroke, it is said to be without Propriety; likewise every ascending ligature, without a stroke on either side, is said to be without propriety; and lastly, every ligature, whether ascending or descending, having a stroke ascending from the first note, is said to be with an opposite Propriety. To this he opposes the rule of Franco, which agrees but ill with this definition, but declines attempting to reconcile the difference, for the reason, that, whether true or false, the rule of Franco is grown out of use.

CHAP. LIII.

THE several measures of time, called, rather improperly, the Modes or Moods, and the methods of distinguishing the one from the other, are now so well adjusted, that their respective characters speak for themselves; but it seems that for some time after the invention of the Cantus Mensurabilis, these, as being regulated by certain laws, the reason whereof is not very apparent, were the subject of great

speculation, as appears by the author now before us; for, after mentioning the modes of the plain cantus to be eight, as undoubtedly they are, being the same with the eight ecclesiastical tones, and to consist in a certain progression of grave and acute sounds, he proceeds to speak of other modes, namely, those of time, or which refer solely to the Cantus Mensurabilis; and a mode in this sense of the word he defines to be a representation of a long sound measured by short times. As to the number of these modes, he says it had been a matter of controversy, that Franco had limited it to five; but that the more modern writers, and the practice of the singers in the Roman church had extended it to six.

To give a general idea of these six modes of time, it is sufficient to say, that the first consisted of a long and a breve ■■■■; the second of a breve and a long ■■■■; the third of one long and two breves ■■■■; the fourth of two breves and one long ■■■■; the fifth, of a progression by longs only ■■■■; and the sixth of breves and semibreves interchanged, in the following order : ■ ■ ■ ◆ ◆ ◆
◆ ◆ ◆ ◆ ◆

But notwithstanding this variety of six, and a greater that might be formed, the author now citing observes, that the modes are reducible to two, namely, the Perfect and the Imperfect, most exactly agreeing with the present theory of measurable music, according to which it is well known that all the possible diversities of measure are comprehended within the general division of duple and triple time; the first whereof being regulated by a measure of two, answering precisely to the old imperfect mode, and the other as exactly corresponding with the perfect mode, the measure whereof is the number three.

Next follow some remarks tending to an explanation of the Ligatures, so obscurely worded that it would answer no purpose to transcribe it; and indeed, after reflecting that Morley lived at a time when this method of notation was practised; and that he, speaking of the ancient writers on the ligatures, says, that 'scarce any two of them tell the same tale,' there is very little ground to hope for more information from any of them than is to be met with in his own valuable work.

The author then goes on to shew that mensurable music proceeds by a gradation from unity to the binary, and from thence to the ternary number, and that within the numbers two and three, all mensurable music is comprehended. To explain this, it may be necessary to mention that where the progression is duple, as when the semibreve contains two minims only, it is said to be Imperfect ; and where it is triple, the semibreve containing three minims, it is called Perfect : and this is the author's meaning when he lays it down as a rule that where a compounded whole contains two equal parts it is called imperfect ; if three, it is called perfect ; the reason of which distinction is founded in an opinion of a certain perfection inherent in the number three, which, as well among the learned as the illiterate has long prevailed. And it seems that this attribute of perfection was applicable in three ways, to the Mode, the Time, and the

Prolation : to the Mode, when the greater measure, the long for example, contained three breves ; to the Time, when the breve, which by Franchinus and other authors is also called a time, contained three semibreves ; and to the Prolation, when the semibreve contained three minims ; though it is to be remarked, that it is more usual to apply the epithet of Greater and Lesser than Perfect and Imperfect to Prolation ; but this distinction of perfection and imperfection, with its various modifications, will be more clearly understood from a perusal of the musical trees, as they are called, herein before inserted, than by any verbal description.

It appears also from the work now citing, that the point, by which at this day we augment any given note half its length in value, was in use so early as the period now speaking of. Its original and genuine uses, according to this author, were two, namely, Perfection and Division ; the first is retained by the moderns, the latter seems to have been better supplied by the invention of bars.

The placing a point after a note is called **Augmentation** ; but it appears by this author and others, that among the old musicians there was a practice called **Diminution**, to which we at this day are strangers, which consisted in rendering a perfect note imperfect. Of this our author gives many instances, which seem to establish the following position as a general rule, that is to say, a perfect note consisting necessarily of three units, is made imperfect, or to consist of only two, by placing a note of the next less value immediately before it, as in this case $\blacksquare \blacksquare \blacksquare$, where by placing a breve before a perfect long, the long is diminished one third part of its value, and thereby made imperfect ; and the same rule holds for the other characters.

Other methods of diminution are here also mentioned, but the practice is now become not only obsolete, but so totally unnecessary, the modern system of notation being abundantly sufficient for expressing every possible combination of measures, that it would be lost time to enquire farther about it.

In the former part of the tract now citing, the author had given a general idea of the consonances in almost the very words of Boetius, whom he appears to have studied very attentively ; but proposing to himself to treat of the practice of descant, which we have already shewn to be in effect composition, and consequently to require a practical knowledge of the use and application of the consonances, he takes occasion in his Rules for Descant, which immediately follow his explanation of the Cantus Mensurabilis, to resume the consideration of the nature of the several intervals that compose the great system. These he divides into consonances and dissonances, and the former again into perfect and imperfect ; the Perfect consonances he makes to be four, namely, the diapason, diapente, diatessaron, and tone, and gives it as a reason for calling them perfect, that the ratio between each of them and its unison is simple and uncompounded, and by these and no other the monochord is divided. The Imperfect consonances he makes also to be four, viz., the semiditone, ditone, semitone

with a diapente, and a tone with a diapente, which he says are called Imperfect, being commensurable by simple proportions, but arising out of the others by such various additions and subtractions as are necessary for their production.

The reason given by this author for reckoning the tone among the consonances, is certainly an inadequate one, since no man ever yet considered the second as any other than a discord, and that so very offensive in its nature, as to excite a sensation even of pain at the hearing it. Of the perfect consonances he makes the diatessaron to be the principal, at the same time that he admits it is not a concord by itself, or, in other words, that it is only a concord when the harmony consists of more than two parts ; to which position the modern practice of using it as a discord in compositions of two parts only, is perfectly agreeable. *

Boetius has by numbers demonstrated the singular properties of this consonance, and shewn that it can only under particular circumstances be received as a concord. His reasoning is very clear and decisive about it ; nevertheless many, not knowing perhaps that the contrary had ever been proved, have ranked the diatessaron among the perfect concords, and that without any restriction whatsoever. †

But whatever may be urged to the contrary, it is certain that the diatessaron is not a perfect consonance ; for wherever a sound is a perfect consonance with its unison, the replicate of that sound will also be a consonance, as is the case with the diapente and diapason, whose replicates are not less grateful to the ear than are the radical sounds themselves ; on the contrary, the replicate of the diatessaron is so far from being a consonance, that the ear will hardly endure it. They that are curious may see this imperfection of the diatessaron demonstrated by numbers in the treatise *De Musica* of Boetius, lib. II. cap. xxvi ‡. But to return to our author.

It is to be remarked that in this place he has not reckoned the unison among the consonances, as all the moderns do ; the reason whereof is, that a sound and its unison are so perfectly one and the same,

* Vide Dr. Pepusch's Short Introduction to Harmony, second edition, pag. 39. 41. In the course of the controversy between Mons. Burette and Mons. Fraguier, mentioned in chap. XXII. the former asserts that in order to render the fourth a concord it must be taken with the sixth. *Mém. de l'Académie Royale des Inscriptions*, &c. tome XI.

† Lord Bacon professes to be of opinion with the ancients, that the diatessaron is to be numbered among the consonances. *Nat. Hist. Cent. II. No. 107*. But it is to be remarked that he ranks it among the semi-perfect consonances, viz., the third and sixth ; and Butler, who calls the rejection of this ancient concord a novel fancy, notwithstanding the authority of Sethus Calvisius, whom he cites, leaves it a question whether the diatessaron be a primary or secondary concord, and after all inclines to the latter opinion. *Principles of Music*, pag. 53, et seq.

The late Dr. Atterbury, bishop of Rochester, who it is supposed had learned a little of music from Dr. Aldrich, affected to think with the ancients that the diatessaron was a perfect consonance. He drew up a small tract on the subject of music, wherein he complains in very affecting terms of the injuries which the diatessaron has sustained from modern musicians, by being degraded from its rightful situation among the concords, and concludes with as ardent wishes and prayers for its restoration, as he could have offered up for that of his master. A MS. of the tract above-mentioned was formerly in the hands of Mr. Tenson the bookseller ; it appeared to be a very futile performance, written probably while the author was at college, extremely rhetorical and declamatory, abounding with figures, but destitute of argument.

‡ It is to be supposed that Salinas was not aware of this demonstration of Boetius, since he mentions a *Resurrexit* for two voices in the famous mass of Jodocus Pratensis, intitled, but for what reason is not known, *L'Homme armé*, so often celebrated by Glareanus, and other writers, wherein the composer has taken the diatessaron, which, says Salinas, he would never have done had he judged it to be a dissonant. *De Musica*, lib. II. cap. 31.

that they admit of no comparison; and, according to Boetius, consonancy is a concordance of dissimilar sounds.

Having explained the nature of concords, he proceeds to give directions for the practice of descant; and first he supposes a plain-song to descant on, to which plain-song he gives the name of Tenor, à teneo, to hold, for it holds or sustains the air, the point, the substance, or meaning of the whole Cantus and every part superadded to it, is considered merely as its auxiliary: and in this disposition of parts, which was constantly and uniformly practised by the old musicians, there appears to be great propriety. Lord Verulam's remark that the extreme sounds, not only of all instruments, but of the human voice, are less pleasing to the ear than those that hold a middle situation, is indisputably true; what therefore can be more rational than that the Air, to borrow a word from the moderns, of a musical composition, should be prolated, not only by sounds the most audible, but also the most grateful to the ear.*

After premising that the perfect concordances are the unison, the fifth, eighth, twelfth, and fifteenth, he says that the Descantus or upper part must begin and also conclude with a perfect concord; that where the plain-song is situated among the grave sounds, the Descantus may begin in the twelfth or fifteenth, otherwise in the eighth or twelfth; and if the plain-song lies chiefly among the acutes, the descant may be in the fifth or eighth. Again, the descant beginning on one or other of the above concords, the descanter is to proceed to the nearest concords, avoiding to take two perfect concords of the same kind consecutively, and so to order his harmony, that when the plain-song ascends the descant shall descend, and vice versa. Farther, if two or more sing upon a plain-song, they must use their best endeavours to avoid taking the same concords. These, as far as they go, are the authors' rules for descant; and to them succeed others more particular, which, as they are peculiarly adapted to, and are descriptive of the practice of descant, are here given in nearly his own words:—

'Let there be four or five men, and the first of them begin the plain-song in the tenor; let the second begin in the fifth, the third in the eighth, and the fourth in the twelfth; and let all continue the plain-song in these concords to the end, observing this, that those who sing in the eighth and twelfth do Break and Flower the notes in such manner as best to grace the melody. But note well that he who sings the Tenor must utter the notes full and distinctly, and that he who descants must take only the imperfect concords, namely, the third, sixth, and tenth, and must proceed by these ascending and descending, as to him shall seem most expedient and pleasing to the ear.' The author adds, that observing these rules each of the singers will appear to descant, when in truth only one does so, the rest

simply modulating on the fundamental melody of the tenor or plain-song.

To give weight to the above precept, which requires the person who sings the tenor to utter the notes fully and distinctly, the author adds, that it is the practice of the Roman palace, and indeed of the French and all other choirs, where the service is skilfully performed, for the tenor, which is to regulate and govern the Descantus, to be audibly and firmly pronounced, lest the descanter should be led to take dissonances instead of concords.

From this and many other passages in this work, wherein the singer is cautioned against the use of discords, and more especially as nothing occurs in it concerning their preparation and resolution, without which every one knows they are intolerable, there is good reason to infer that the use of discords in musical composition was unknown at the time when this author wrote, which at the latest has been shewn to be anno 1326. But the particular æra of this improvement will be the subject of future enquiry.

Whoever shall attentively peruse the foregoing passages, and reflect on the nature and end of musical composition, in fact will find it extremely difficult to conceive it possible for five, or four, or even three persons, thus extemporaneously, and without any other assistance than a written paper, which each is supposed to have before him, containing the melody upon which he is to sing, to produce a succession of such sounds as shall be grateful to the ear, and consequently consistent with the laws of harmony. As difficult also is it to discern the possibility of avoiding the frequent repetition of the same concords, the taking whereof in consecution is by the rule above laid down expressly forbidden.

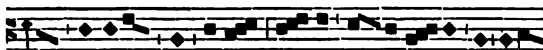
This is certain, that notwithstanding the generality of the practice of extempore descant, and the effects ascribed to it, so long ago as the reign of queen Elizabeth it was a matter of doubt with one of the greatest masters of that time, whether, supposing three or more persons to sing extempore on a plain-song, the result of their joint endeavours could possibly be any other than discord and confusion.

Having thus explained the nature of extempore descant, the author proceeds to treat of Polyphonus or Symphonic music at large; and here it is necessary to be observed, that although the precepts of descant, as given by him, do in general refer to that kind of musical composition, which is understood by the word Counterpoint; yet, from the directions which he gives for Flowering or breaking the notes, and from sundry passages that occur in his work, where he speaks of a Conjunction, and in others of a Conglutination of notes in one and the same part, there is ground to imagine that even so early as the time of composing this tract the studies of musicians were not confined to counterpoint, but that they had some idea of Canto Figurato. And this opinion is rendered to the highest degree probable by the concluding pages of his work, which contain an explanation of the nature and use of Hockets.

It must be confessed that at this day the word Hocket is not very intelligible; its etymology does

* It seems that the contrary practice, namely, that of giving the air to the Soprano, or upper part, had its rise in the theatre, and followed the introduction of Castrati into musical performances; since that it has been adopted by the composers of instrumental music, and it is now universally the rule to give the principal melody to the first violin.

not occur on perusal, and none of our dictionaries, either general or technical, furnish us with a definition of it. We must therefore be content with such an explanation of this barbarous term as is only to be met with in the authors that use it; the earliest of these is De Handlo, who, in his twelfth rubric, without professing to define the term, says, that 'Hockets are formed by the combination of notes and pauses.' The author of the tract now citing has this passage: 'One descant is simply prolated, that is without fractions or divisions; another is 'copulated or flowered; and another is Truncatus or 'mangled, and such as this last are termed Hockets;' the meaning whereof in other words seems to be, that one descant is simple, even, and corresponding in length of notes with the plain-song; another copulated, and consisting of certain bundles or Compages of notes, coinciding with the plain-song only in respect of the general measure by which it is regulated; and another consisting of notes and pauses intermixed; and a combination of notes and pauses thus formed is called a Hocket. And elsewhere he says a truncation [Truncatio, Lat.] is a Cantus, prolated in a maimed or mangled manner by expressed [rectæ] notes, and by omitted notes, which can mean only pauses; and that a truncation is the same as a hocket, as an example whereof he gives the following:—



Upon which he remarks that a hocket may be formed upon any given tenor or plain-song, so that while one sings, the other or others may be silent; but yet there must be a general equivalence in the times or measures, as also a concordance between the prolated notes of the several parts.

The author next proceeds to speak of the organ as an instrument necessary in the Cantus Ecclesiasticus, the antiquity whereof he confesses himself at a loss to ascertain. He says it is of Greek invention, for that in the year 797 an organ was sent by Constantine king of the Greeks to Pepin, emperor of France, at which time he says the Cantus Mensurabilis was unknown. He says that this improvement of music was made by slow degrees, and that Franco was the first approved author who wrote on it.

CHAP. LIV.

THE next succeeding tract in the Cotton manuscript, beginning 'Cognita modulatione Melorum secundum viam octo Troporum,' by an anonymous author, is altogether as it should seem on the Cantus Mensurabilis; and by this it clearly appears, that as among the ancient musicians there were eight tones, modes, or tropes of melody, or, in other words, eight ecclesiastical tones, so were there eight modes of time in use among them; and this, notwithstanding it is said in the former tract that Franco had limited the number to five; but for this the same reason may be given as for extending it to six, against the precept

of Franco, to wit, that it was the practice of the singers in the Roman palace.*

The author speaks of one Magister Leoninus as a celebrated musician of the time, and also of a person named Perotinus,† whom he surnames the Great whenever he takes occasion to mention him.

The tract now citing goes on to say of Leoninus, before-mentioned, that he was a most excellent organist, and that he made a great book of the Organum for the Gradual and the Antiphonam, in order to improve the divine service; and that it was in use till the time of Perotinus; but that the latter, who was an excellent descanter, indeed a better than Leoninus himself, abbreviated it, and made better points or subjects for descant or fugue, and made also many excellent quadruples and triples. The same author says that the compositions of Perotinus Magnus were used till the time of Robertus de Sabillone, in the choir of the greater church of the Blessed Virgin at Paris. Mention is here also made of Peter, a most excellent notator, and John, dictus Primarius, Thomas de Sancto Juliano, a Parisian, and others deeply skilled in the Cantus Mensurabilis. These for the most part are celebrated as excellent notators; but the same author mentions some others as famous for their skill in descant, and other parts of practical music, as namely, Theobaldus Gallicus, Simon de Sacalia, and Joannes de Franconus of Picardy. He says farther that there were in England men who sang very delightfully, as Johannes Filius Dei, one Makeblits of Winchester, and another named Blakismet, probably Blacksmith, a singer in the palace of our lord Henry the last. He speaks of the Spaniards, and those of Pampeluna, and of the English and French in general, as excelling in music.

The author, after an explanation of the modes of time, the nature of the ligatures, and other particulars, of which an account has already been given, proceeds to relate what must be thought a matter of some curiosity, namely, that the stave of five lines, which was, as indeed appears from old musical manuscripts, for some purposes reduced to a less number, was frequently made to consist of lines of different colours. As this seems to coincide with a passage in the Micrologus of Guido, it is worthy of remark.

The passage in the author now citing is very curious, and is here given in a translation of his own words:—'Some notators were accustomed in the 'Cantus Ecclesiasticus always to rule Four lines of 'the same colour between two of writing, or above 'one line of writing; but the ancients were not accustomed to have more than three lines of different 'colours, and others two of different colours; and 'others one of one colour, their lines were ruled with

* Vide supra, pag. 235.

† In bishop Tanner's Bibliotheca, and also in the Fasti Oxon, vol. I. col. 23, is an article for Robert Perrot, born at Haroldston in the county of Pembroke, a doctor of music, and organist of Magdalen college in Oxford, the composer of the music to various sacred hymns; and there would be little doubt that he was the person here meant, but that he is said to have died in 1550. However it is to be observed that the Cotton manuscript contains a number of treatises on music by different authors; and though the first carries evidence on the face of it, that it was composed so early as 1326, it does not follow that the others are of as great antiquity. Nay there is no reason to suppose that that now under consideration is so ancient as that the person mentioned by Tanner might not be the Perotinus Magnus above celebrated.

'some hard metal, as in the Cartumensian and other books, but such books are not used among the organists in France, in Spain and Arragon, in Pamplone, or England, nor many other places, according to what fully appears in their books, but they used Red or Black lines drawn with ink. At the beginning of a cantus they placed a sign, as, F or c or g; and in some parts d. Also some of the ancients made use of points instead of notes. Observe that organists in their books make use of five lines, but in the tenors of descants are used only four, because the tenor was always used to be taken from the ecclesiastical cantus, noted by four lines, &c.*

Farther on the author speaks of a method of notation by the letters of the alphabet, which is no other than that introduced by St. Gregory; the examples he gives are of letters in the old Gothic character, and such are to be seen in the *Storia della Musica* of Padre Martini, vol. I. pag. 178; but he says that the method of notation in use in his time was by points, either round or square, sometimes with a tail and sometimes without.

Having treated thus largely of the *Cantus Mensurabilis*, he proceeds to an explanation of the harmonical concordances, in which as he does but abridge Boetius, it is needless to follow him.

He then proceeds to relate that the word *Organum* is used in various senses, for that it sometimes signifies the instrument itself, and at other times that kind of choral accompaniment which comprehends the whole harmony, and is treated of in the *Micrologus* of Guido. He speaks also of the *Organum Simplex*, or pure organ, a term which frequently occurs in the monkish musical writers, and which seems to mean the unisonous accompaniment of the tenor or other single voice in the versicles of the service. The precepts for the *Organum* or general accompaniment are manifestly taken from Guido, and the examples are in letters like those in the *Micrologus*.

Next follow the rudiments of descant, of which sufficient has been said already.

Speaking of the Triples, Quadruples, and Copulæ, terms that in this place relate to the *Cantus Mensurabilis*, he digresses to descant; and, speaking of the concords, says that although the ditone and semiditone are not reckoned among the perfect concords, yet that among the best organists in some countries, as in England, in the country called Westcontre, they are used as such.

And here it is to be observed, that for the first time we meet with the mention of Discords; for the author now citing says, that many good organists and makers of hymns and antiphons put discords in the room of concords, without any rule or consideration, except that the discord of a tone or second be taken before a perfect concord. He adds, that this practice was much in use with the organists of Lombardy.

A little farther on he speaks of the works of Perotinus Magnus, in six volumes, which he says contain the colours and beauties of the whole musical art.

The author of the above-cited tract appears to have

been deeply skilled, at least in the practical part of music, and to have been better acquainted with the general state of it, than most of the writers in those dark times. It should seem by his manner of speaking of England and of the West Contre, which very probably he mistook for the North country, which abounded with good singers and musicians, that he was a foreigner; and his styling Pepin Emperor of France, at the instant that he calls Constantine King of the Greeks, is a ground for conjecture that he was a Frenchman.

What follow in the Cotton manuscripts are rather detached pieces or extracts from some larger works, than complete treatises themselves: the first of these, beginning '*Sequitur de Sineminis*,' is a short discourse, chiefly on the use and application of the Synemmenon tetrachord, in which it is to be remarked that the author takes occasion to mention the use of a cross between F and G, corresponding most exactly to that acute signature which is used at this day to prevent the tritonus or defective fifth between *h* and *f*.

The next, beginning '*Est autem unisonus*,' treats very briefly of the consonances, of descant, and of solmisation, the practice whereof is illustrated by the figure of a hand, with the syllables placed on the several joints, as represented by other authors, together with examples in notes to explain the doctrine.

The last tract, beginning '*Cum in isto tractatu*,' which is chiefly on the *Cantus Mensurabilis*, contains little worthy of observation except the words '*Hæc Odyngtonus*,' at the end of it, to account for which is a matter of great difficulty.

Odyngtonus [Gualterus,] Odendunus, et Gualterius Eveshamensis, or Walter of Evesham, was a monk of Evesham, in the county of Worcester, and a very able astronomer and musician.† He wrote *De Speculatione Musices*, lib. VI., and the manuscript is in the library of Christ Church college, Cambridge. The titles of the several books are as follow:—

'*Prima pars est de inæqualitate numerorum et eorum habitudine. Secunda de inæqualitate sonorum sub portione numerali et ratione concordiarum. Tertia de compositione instrumentorum musicorum, et de Quarta de inæqualitate temporum in pedibus, quibus metra et rhythmus decurrunt. Quinta de harmonia simplici, i.e. de plano cantu. Sexta et ultima de harmonia multiplici, i.e. de organo et ejus speciebus, necnon de compositione et figuracione.*'‡

Now it is observable that not one of the six books professes to treat of the *Cantus Mensurabilis*; on the contrary, the title of the fourth is '*De inæqualitate temporum in pedibus, quibus metra et rhythmus decurrunt*;' terms that ceased to be made use of after the invention of the *Cantus Mensurabilis*. This is enough to excite a suspicion that Odyngtonus was not the author of the tract in question; but the time when he lived is not to be reconciled to the supposition that he knew aught of its contents.

In short he flourished about the beginning of the thirteenth century: his name occurs as a witness to

* The number of lines for the *Cantus Ecclesiasticus* was settled at four in the thirteenth century. *Stor. della Musica*, pag. 399, in not.

† Vide supra, pag. 184.

‡ Tann. Biblioth. 558, in not.

a charter of Stephen Langton, archbishop of Canterbury, in the year 1220. It is said that Walter of Evesham, a monk of Canterbury, was elected archbishop of Canterbury 12 Hen. III. A. D. 1228, but that the pope vacated the election.* The conclusion deducible from these premises is obvious.

A few loose notes of the different kinds of metre conclude the collection of tracts above-cited by the name of the Cotton Manuscript, of which perhaps there is no copy extant other than that made use of in this work. It contains 210 folio pages, written in a legible hand; and as the original from whence it was taken is rendered useless, it may possibly hereafter be given up to the public, and deposited in the British Museum.

Another manuscript volume, little less curious than that above-mentioned, has been frequently referred to in the course of this work by the name of the manuscript of Waltham Holy Cross. The title whereof is contained in the following inscription on the first leaf thereof: 'Hunc librum vocitatum Musicam Guidonis, scripsit dominus Johannes Wylde, quondam exempti monasterii sanctæ Crucis de Waltham precentor.' And then follows this, which imports no less than a curse on any who should by stealing or defacing the book deprive the monastery of the fruit of his labours:—

'Quem quidem librum, aut hunc titulum, qui malitiosè abstulerit aut deleverit, anathema sit.†

Notwithstanding which, upon the suppression of the monastery, violent hands were laid on it, and it became the property of Tallis, as appears by his name of his own handwriting in the last leaf; and there is little reason to suspect that he felt the effects of the anathema.

Of this religious foundation, the monastery of Waltham Holy Cross, in Essex, which in truth was nothing less than a mitred abbey, possessed of great privileges, and a very extensive jurisdiction in the counties of Hertford and Essex, in which last it was situated, a history is given in the Monasticon of Sir William Dugdale; and some farther particulars relating to it may be found in the History of Waltham Abbey, by Dr. Fuller, at the end of his Church History. Here it may suffice to say, that the church and buildings belonging to it were very spacious and magnificent; and here, as in most abbeys and conventual churches, where the endowment would admit of it, choral service was duly performed, the conduct whereof was the peculiar duty of a well-known officer called the precentor.

At what time the above-mentioned John Wylde lived does no where appear, but there is reason to conjecture that it was about the year 1400.

Upon the title of this manuscript, Musicam Gui-

donis, it is to be observed that it is not the work of Guido himself, but a collection of the precepts contained in the Micrologus, and other of his writings, and that therefore the appellation which Wylde has given to it, importing it to be Guidonian music, is very proper.

The manuscript begins 'Quia juxta sapientissimum Salomonem dura est, ut inferius emulatio,' which are the first words to the preface of the book, in which the compiler complains of the envy of some persons, but resolves notwithstanding to deliver the precepts of Boetius, Macrobius, and Guido, from whom he professes to have taken the greatest part of his work; meaning, as he says, to deliver not their words, but their sentiments. He distinguishes music into Manual and Tonal, the first so-called from the Hand, to the joints whereof the notes of the Gamut or scale are usually applied. The Tonal he says is so called, as treating particularly of the Tones. Upon the use of the hand he observes that the Gamut is adapted to the hands of boys, that they may always carry, as it were, the scale about them; and adds that the left hand is used rather than the right, because it is the nearest the heart.

The tract now citing contains twenty-two chapters with an introduction, declaring the pre-requisites to the right understanding the scale of Guido, as namely, the succession of the letters and syllables in the first or grave series, with the distinction between *h* and *b*. Then follows the scale itself, called the Gamma, answering to Guido's division of the monochord, which is followed by the figure of a hand, with the notes and syllables disposed in order on the several joints thereof, as has already been represented.

In the first chapter the author treats of the invention of music, of those who introduced it into the church, and of the etymology of the word Music. Upon the authority of the book of Genesis he asserts that Tubal Cain invented music; and, borrowing from the relation of Pythagoras, he interposes a fiction of his own, saying that he found out the proportions by the sound of hammers used by his brother, who, according to him, was a worker in iron. He says that St. Ambrose, and after him pope Gregory, introduced into the church the modulations of Graduals, Antiphons, and Hymns. As to the etymology of the word Music, he says, as do many others, that it is derived from the word Moys, signifying water.

In Chap. II. the author speaks of the power of music, and cites a passage from Macrobius's Commentary on the Somnium Scipionis of Cicero, to shew that it banishes care, persuades to clemency, and heals the diseases of the body. He adds that the angels themselves are delighted with devout songs, and that therefore it is not to be wondered that the fathers have introduced into the church this alone of the seven liberal sciences.

In Chap. III. it is said that the ancient Greeks noted the musical sounds with certain characters, as appears by the table in Boetius, but that the Latins afterwards changed them for those simple letters, which in the calendar are made use of to denote the

* Tann. in loc. citat.

† Admonitions of this kind are frequently to be met with in manuscripts that formerly belonged to religious houses. That mentioned in pag. 234 of this work, as containing the tract De quatuor Principalia, &c. now in the Bodleian library, had been given to a convent of friars minors in 1388; and the last leaf of it is thus inscribed: 'Ad informationem scribentibus principia artis musice: istum libellum vocatur Quatuor Principalia Musice. Frater Johannes de Tewkesbury contulit communitati fratrum minorum Oxoniæ auctoritate et assensu fratris Thomæ de Kyngesbury tunc ministri Angliæ, viz. Anno Domini 1388. Ita qui non alienatur à prædictâ communitate fratrum sub penâ sacrilegii.'

seven days of the week, as A, B, C, D, E, F, G; and that they assumed only seven letters, because, as Virgil says, there are only seven differences of sounds; and nature herself witnesses that the eighth is no other than the replicate of the first, with this difference, that the one is grave and the other acute.

Chap. IV. contains the reasons why the Greek Γ was prefixed by the Latins to the scale, and why that letter rather than any other. The reasons given by the author seem to be of his own invention; and he seems to have forgot that Guido was the first that made use of that character.

The reasons contained in Chap. V. for the repetition of the letters to the number nineteen, are not less inconclusive than those contained in the former chapter, and are therefore not worth enumerating.

Chap. VI. assigns a reason why the letters are differently described in the monochord, that is to say, some greater, some lesser, some square, some round, and some doubled. The following are the author's words :—

'As the foundation is more worthy and solid than the rest of the edifice, so in the musical fabric the letters that are placed in the bottom are not improperly made larger and stronger than those which follow, it is therefore that they should be made square, as every thing that is square stands the firmest.* The other septenary ought to be made less, for as we begin from the bottom, the higher we ascend by regular steps, the more subtle or acute does the sound become: roundness then best suits in its nature with these seven letters, for that which is round is more easily moved about; and the sounds which are placed between the grave and superacute are the most easy for the voice of the singer to move in, seeing he can readily pass from the one to the other freely and at his pleasure; the four remaining letters are formed double, and as it were with two bellies, because they are formed to make a biadapason with the grave, that is a double diapason.'

In Chap. VII. we meet with the names of Guido the Younger, and Guido the Elder, by the latter of whom the author certainly means Guido Aretinus,

* This method of illustration by reasons drawn from a subject foreign to that to which they are applied, is not unusual with the authors who wrote before the revival of literature. Bracton, an eminent civil and common lawyer of the thirteenth century, speaking of the right to the inheritance of land, and the course of lineal descent, says that it is ever downwards, that is to say, from father to son, and for it gives this notable reason: 'Quod quasi ponderosum quiddam jure naturæ descendit, nam omne grave fertur deorsum.' De Legibus lib II. cap. 29. et vide Coke's Reports, part III. fol. 40, Ratcliff's case. In a life of Æsop, the reputed author of the fables that go under his name, supposed to be written by a Greek monk named Maximus Planudes, who lived about the year 1317, is a curious specimen of physiological ratiocination, somewhat resembling the former. A gardener proposed this question to Xanthus, a philosopher, the master of Æsop: 'What is the reason that the herbs which I plant grow not so fast as those which the earth produces spontaneously?' The philosopher resolved it into the divine Providence; but the gardener not being satisfied with this answer, Xanthus, unable to give a better, refers him to his slave Æsop, who bespeaks the gardener thus:—'A widow with children marries a second husband, who hath children also: to the children by her former husband she stands in the relation of mother; but to those of her second husband, the issue of his former marriage, she is no more than step-mother, the consequence whereof is, that she is less affectionate to them than to the children of her husband. In like manner,' continues Æsop to the gardener, 'the earth, to those things which she produces spontaneously is a mother, but to those which thou plantest she is a step-mother: the one she nourishes, and the other she slights.' The gardener was as much the wiser for this answer as those who enquire why the great letters are the lowest in the scale, or why land descends rather than ascends, are made, by the answers severally given to those demands.

for he cites the Sapphic verse, 'Ut queant laxis,' &c. from whence the syllables UT, RE, MI, FA, SOL, LA, are universally allowed to have been taken; who is meant by Guido the Younger will be shewn hereafter.

In Chap. VIII. he speaks of the six syllables, and the notes adapted to them, and seems to blame Guido for not giving a seventh to the last note of the septenary. It has already been mentioned that Dr. Wallis and others have lamented that Guido did not take the first syllable of the last line of the verse 'Sancte Johannes;' and the author here cited seems to intimate that he might have done so; but it evidently appears that he was not in earnest, for see his words: 'The author seems here blameable for not marking the seventh with a syllable, especially as there are so many particles in that verse; he might have assigned the first syllable of the last line to the seventh note thus, Sancte Joannes, as this syllable is as different from all the rest as the seventh sound is. What fault, I pray you, did the last line commit, that its first syllable should not be disposed of to the seventh note, as all the other first syllables were assigned to the rest of the notes? But fair and soft, because a semitone always occurs in the seventh step, which semitone is contained under these two notes, FA and MI; for when the semitone returns to the seventh step, in the sixth you will have MI, and in the seventh FA. But if the eighth step, a tritone intervening, makes the semitone, all the syllables of the notes are expended; therefore whether you will or no, unless you make false music, the semitone, to wit MI, returns in the seventh, if the disposition be elevated; but if it be remitted it will give FA, which nevertheless makes a semitone under it; therefore these two notes, on whose account these names were particularly instituted, will have as many notes above as below, marked with their proper syllables, for MI has under it two, RE and UT; and FA has two above, SOL and LA.'

Chap. IX. treats of the Mutations, which are changes of the syllables, occasioned by the going out of one hexachord into another; concerning which the author with great simplicity observes, that as the cutters out of leather or cloth, when the stuff runs short, are obliged to piece it to make it longer; so when either in the intension or remission of the scale the notes exceed the syllables, there is a necessity for repeating the latter. What follows on this head will best be given in the author's own words, which are these:—'We must substitute for that which is deficient such a note as may supply the defect by proceeding farther: hence it is that with the note LA, which cannot of itself proceed any higher, you will always find such a note as can at least ascend four steps, LA, MI, FA, SOL, LA. In the same manner the note UT, which of itself can nowhere descend, will have a collateral, which may at least be depressed four notes, UT, FA, MI, RE, UT, the Greek Γ and d superacute are excepted; the first whereof has neither the power nor the necessity of being remitted, nor the other that of ascending; for which reason UT and LA can never have the same stations.'

The nine succeeding chapters relate chiefly to the mutations, and the use of the square and round or soft b, which, as it is sufficiently understood at this day, it is needless to enlarge upon.

Chap. XIX. treats of the Keys, by which are to be understood in this place nothing more than the characters F C g prefixed to the head of the stave: he says these letters are called keys, for that as a key opens an entrance to that which is locked up, so the letters give an entrance to the knowledge of the whole cantus, to which they are prefixed; and that without them the singer would find it impossible to avoid sometimes prolating a tone for a semitone, and vice versa, or to distinguish one conjunction from another. At the end of this chapter he censures the practice of certain unskilful notators or writers of music, who he says were used to forge adulterate and illegitimate keys, as by putting D grave under F, a acute under c, and e acute under g, making thereby as many keys as lines.

Chap. XX. demonstrates that b round and h square are not to be computed among the keys. This demonstration is effected in a manner curious and diverting, namely by the supposition of a combat between these two characters, a relation whereof, with the various success of the combatants, is here given in the author's own words: 'Observe that b round and h square are not to be computed among the keys; first, because they wander through an empty breadth of space, without any certainty of a line; next because they can never be placed in any line without the support of another key, for it is necessary that another key should be prefixed to the line. Moreover as h square never appears, unless b round come before it; and b soft ought not to be set down unless we are to sing by it: can any thing of its coming be expected if it be not immediately prefixed to the beginning of a line of another key, as it is never to be sung without a key? Likewise, as they are mutually overthrown by each other, and each is made accidental, who can pronounce them legitimate keys? for unless b round comes in and gives the first blow as a challenge, h square would never furnish matter for the beginning of a combat; but as soon as it appears it entirely overthrows its adversary b round, which only makes a soft resistance. But sometimes it happens that b round, though lying prostrate, recovering new strength, rises up stronger, and throws down h square, who was triumphing after his victory.' For the reasons deducible from this artless allegory, which it is probable the author of it, a simple illiterate monk, thought a notable effort of his invention, and because h square and b round are not stable or permanent, he pronounces that they cannot with propriety be termed keys.

In Chap. XXI. the author gives the reason why the notes are placed alternately on the lines and spaces of the stave: but first, to prove the necessity of the lines, he shrewdly observes, that without them no certain progression could be observed by the voice. 'Would not,' he asks, 'in that case the notes seem to shew like small birds flying through the

'empty immensity of air?' Farther he says, that were they placed on the lines only, no less confusion would arise, for that the multitude of lines would confound the sight, since a cantus may sometimes include a compass of ten notes. He says, which is true, that in order to distinguish between each series of notes, the grave, the acute, and the superacute, any one given note, which in the grave is placed on a line, will in the acute fall on a space, and that in the superacute it will fall on a line again. He adds, that in a simple cantus no more lines are used than four, to which are assigned five spaces,* for this reason, that the ancient musicians, by whom he must be understood to mean those after the time of Gregory, never permitted any tone to exceed the compass of a diapason; so that every tone had as many notes as there were tones. He says farther that the modern musicians would sometimes extend a cantus to a tenth note; but that nevertheless it did not run through ten notes, but that the tenth, which might be either the highest or the lowest, was only occasionally touched. He adds that when this is the case, the key or letter should be changed for a short time; or, in other words, that one letter may be substituted for another on the same line. Upon this passage is a marginal note, signifying that it is better in such a case to add a line than to transpose the letter or cliff, which is the practice at this day.

To this chapter the author subjoins a cantus for the reader to exercise himself, in which he says he will find six verses applied, two for the grave, two for the acute, and two for the superacute. The cantus is without musical characters, and is in the words following:—

For the graves,

*Hâc puer, arte scies gravium mutamina vocum,
Quæ quibus approprias nomina, quemve locum.*

For the acutes,

*Reddit versutas versuta b mollis acuta,
Quas male dum mutas, mollia quadra putas.*

For the superacutes,

*Gutturis arterias cruciat vox alta b mollis;
Difficilis collis reddit ubique vias.*

Chap. XXII. contains what is called a cantus of the second tone, in which the mutations of the four grave letters C, D, E, F, are contained; it is with musical notes, but they are utterly inexplicable.

CHAP. LV.

UPON the above twenty-two chapters, which constitute the first part or distinction, as it is termed, of the first tract, it is observable that they contain, as they profess to do, the precepts of Manual music; and that this first part is a very full and perspicuous commentary on so much of the Micrologus as relates to that subject.

The second part or distinction, intitled Of Tonal Music, contains thirty-one chapters. In the first

* That is to say three between the lines, one at top, and another at bottom. Martini says that the number of lines to denote the tones was settled at four in the thirteenth century. Stor. dell. Mus. pag. 309, in not.

whereof is an intimation of the person in the seventh chapter of the former part, distinguished by the appellation of Guido Minor; he says that he was surnamed Augensis, and that by his care and industry the cantus of the Cistercian order had been regularly corrected. He cites a little book written by the same Guido Minor for a definition of the consonances.

In Chap. II. he defines the semitone in a quotation from Macrobius, demonstrating it to be no other than the Pythagorean limma.

Chap. III. treats of the Tone, a word which the author says has two significations, namely, a *Maniera*, a term synonymous with ecclesiastical tone, or an interval in a sesquioctave ratio.

From these two intervals, namely, the tone and semitone, the author asserts that all the concords are generated, and the whole fabric of music arises; in which respect, says this learned writer, 'They, that is to say, the tone and semitone, may be very aptly compared to Leah and Rachael, of whom it is related in the book of Genesis that they built up the house of Israel.' It would be doing injustice to this ingenious argument to give it in any other words than those of the author. Here they are, and it is hoped the reader will edify by them:—

— 'For as Jacob was first joined in marriage to Leah, and afterwards to Rachael, thus sound, the element of music, first produces a tone, and afterwards a semitone, and is in some sense married to them. The semitone, from which the symphony of all music principally is generated, as it tempers the rigour and asperity of the tones, may aptly be assigned to Rachael, who chiefly captivated the heart of Jacob, as she had a beautiful face and graceful aspect. Moreover a semitone is made up of four parts, and, unless a tritone intervenes, is always in the fourth step; so also Rachael is recorded to have had four sons, two of her own, and two by her handmaid. "Enter in, says she, to my handmaid, that she may bring forth upon my knees, that I may at least have children from her." The tone rendering a rigid and harsh sound, but frequently presenting itself, agrees with Leah, who was bleary-eyed, and was married to Jacob against his will; but fruitful in the number of her children. The proportion of the tone is superoctave; Leah had also eight sons, namely, six natural sons, and two adopted, that were born of her handmaid: but the ninth part, which is less than the rest or others, may aptly be compared to Dinah, the daughter of Leah, who bore afterwards eight sons. When Leah had four sons she ceased bearing children, and the adopted ones followed: when four steps of the notes are made, a semitone follows, which is divided into two sorts, as has been said; these may be compared to the following sons, the two natural ones, which Leah had afterwards, and also the two adopted ones. Then follow Joseph and Benjamin, the natural sons of Rachael.'

Chap. IV. treats of the ditone.

Chap. V. Of the semiditone and its species, which are clearly two.

Chapters VI. VII. and VIII. treat respectively of the diatessaron, diapente, and diapason, with their

several species, which have already been very fully explained.

Chap. IX. shews how the seven species of diapason are generated.

Chap. X. contains a Cantilena, as it is said, of Guido Aretinus, including as well the dissonances as the consonances. It is a kind of praxis on the intervals that constitute the scale, such as are frequently to be met with in the musical tracts of the monkish writers, and in those written by the German musicians for the instruction of youth about the time of Luther;* but as to this, whether it be of Guido or not, it is highly venerable in respect of its antiquity, as being in all probability one of the oldest compositions of the kind in the world:—

TER ter - ni sunt mo-di, quibus omnis can-ti-le-na

contex-i-tur, sci-li-cet, U-ni-sonus, Semi-to-nium,

Tonus, Semiditonus, Ditonus, Dyatessaron, Dyapente,

Semitonium cum Dyapente. Ad hæc Tonus Dyapason

al quam de-lectet, e-jus hunc modum es-se ag-nos-cat

qu-umque tam paucis clausulis to-ta armo-ni-a forma-tur,

u-ti-lis-si-mum est e-as al-ta me-mo-ri-a commendare,

Nec pri-us ab hu-jus mo-di stu-di-o qui-es-ce-re, donec

vocum intervallis agnatis Armo-ni-a-to-ti-us fa-cil-li-me

que-as comprehendere no-ti-ti-am. Tonus.

Se-mi-to-ni-us. Di-to-nus. Se-mi-di-to-nus. Dy-a-tes-

-sa-ron. Dyapente. Dy-a-pason.

et intente et re-mis-se pa-ri-ter con-so-nan-ti-a.

* Many such are extant in print; they are in easy Latin, and resemble in size and form the common Latin Accidence. The sense that the reformers entertained of the great importance of a musical education, may be inferred from the pains they took to disseminate the rudiments of plain and measurable music, and to render the practice of singing familiar to children; and there cannot be the least doubt but that the singing and getting by heart such a Cantilena as is here given, was as frequent an exercise for a child as the declension of a noun, or the conjugation of a verb.

Chap. XI. treats of the nature of *b* round, of which enough has been said already.

Of Chap. XII. there is nothing more than the title, purporting that the chapter is an explanation of a certain Formula or diagram which was never inserted.

Chap. XIII. treats of the species of diapason, and shews how the eight tones arise therefrom. This chapter is very intricate and obscure; and as it contains a far less satisfactory account of the subject than has already been given from Franchinus, and other writers of unquestioned authority, the substance of it is here omitted.

Chap. XIV. treats of the four Manieras, and farther of the eight tones. Maniera, as this author asserts, is a term taken from the French, and seems to be synonymous with Mode; a little lower he says that a Maniera is the property of a cantus, or that rule whereby we determine the final note of any cantus. In short, he uses Maniera to express the Genus, and Tone the Species of the ecclesiastical modes or tones. In this chapter he complains of the levity of the moderns in making use of *b* soft, and introducing feigned music,* which in his time he complains had been greatly multiplied.

Chap. XV. concerns only the finals of the several manieras and tones.

Chap. XVI. contains certain curious observations on the terms Authentic and Plagal, as applied to the tones; these are as follow:—

—‘Some tones are called authentic, and some ‘plagal; for in every maniera the first is called ‘authentic, the second plagal. The first, third, fifth, ‘and seventh are termed authentic from the word ‘Authority; because they are accounted more worthy ‘than their plagals: they are collected by the uneven ‘numbers, which among the philosophers were called ‘masculine, because they do not admit of being divided equally into two parts: thus man cannot be ‘easily turned aside or diverted from his purpose; ‘but an even number, because it may be divided into ‘two equally, is by them not unaptly called woman, ‘because she sometimes weeps, sometimes laughs, and ‘soon yields and gives way in the time of temptation. ‘Hence it is that the second, fourth, sixth, and eighth ‘tones are ascribed to the even number, because the ‘feminine sex is coupled in marriage to the masculine sex: they are called collateral or plagal, that ‘is, provincials to the authentics. And that you may ‘the sooner learn the properties and natures of each ‘of the tones, those songs are called authentic which ‘ascend more freely and higher from their final letter, ‘running more wantonly by leaps and various bendings backwards and forwards; in the same manner ‘as it becomes men to exercise their strength in ‘wrestling and other sports, and to be employed in ‘their necessary affairs and occupations in remote ‘parts, until they return back to the final letter by ‘which they are to be finished, as to their own house

* Described by Franchinus, *Pract. Mus. lib. III. cap. xiii. De fictis Musicis contrapunoto*, and by Andreas Ornithoparcus, in his *Micrologus*, lib. I. cap. x. the latter calls it that kind of music termed by the Greeks *Symmenon*, or a song that abounds with conjunctions; but it had been better to have called it music transposed from its natural key by *b* round, the characteristic of the *symmenon* tetrachord, in which case *B b*, *E b*, or *A b*, might be made finals, as they now frequently are, but it seems that the old musicians abhorred the practice.

‘or home, after the completion of their affairs. But ‘the plagal or collateral songs are those which do not ‘mount up so as to produce the higher parts, but turn ‘aside into the lower, in the region under the letter ‘by which they are to be terminated, and make their ‘stops or delays and circuits about the final letter, ‘sometimes below and sometimes above; as a woman ‘that is tied to a husband does not usually go far from ‘her home, and run about, but is orderly and decently ‘employed in taking care of her family and domestic ‘concerns.’

Chap. XVII. assigns the reasons why the final notes are included between *D* grave and *c* acute; but the author means to be understood that the double, triple, and quadruple cantus, which are vocal compositions of two, three and four parts, are not restrained to this rule, for in such no more is required than that the under part be subservient to it. It appears that of the final notes, by which, to mention it once for all, the terminations of the several tones are meant, four are grave, and three only acute: for this inequality the author gives a notable reason, namely, that by reason of the load of carnal infirmities that weigh them down, fewer men are found to have grave and rude, than acute and sweet voices.

Chap. XVIII. the author shews from Guido, and other teachers of the musical art, that the compass of a diapason is sufficient for any cantus. Notwithstanding which he says some contend that ten, and even eleven notes are necessary. This notion the author condemns, and says that the unison and its octave resemble the walls of a city, and that the ninth, which is placed above the octave, and the tenth, stationed under the unison, answer to the *pallisado* or ditch; and that as it is customary to walk about on the walls, and in the city itself, but not in the ditch, or by the *pallisado*, it becomes all who profess to travel in the path of perfection, to accommodate themselves to this practice, which he says is both modest and decent.†

The following chapters, which are fifteen in number, exhibit a precise designation of the eight ecclesiastical tones; but as these have been very fully explained from Gaffurius, and other writers of acknowledged authority, it is unnecessary to lengthen this account of Wylde's tract by an explanation of them from him.

There is very little doubt but that Wylde was an excellent practical singer, as indeed his office of precentor of so large a choir as that of Waltham required he should be. His book is very properly called a *System of Guidonian Music*, for it extends no farther than an illustration of those precepts which Guido Aretinus taught: hardly a passage occurs in it to intimate that he was in the least acquainted with the writings of the Greeks, excepting that where he cites Ptolemy by the name of Tholomæus. The truth of the matter is, that at the time when Wylde wrote, the writings of Aristoxenus, Euclid, Nicomachus, and the other Greek harmonicians, were at Constantinople, or Byzantium

† He gives an example of a double cantus at the beginning of Chapter I, which clearly shews that by a double cantus we are to understand one in two parts.

as it was called, which was then the seat of literature. How and by whom they were brought into Italy, and the doctrines contained in them diffused throughout Europe, will in due time be related.

The tract immediately following that of Wylde in the manuscript of Waltham Holy Cross is entitled 'De octo Tonis ubi nascuntur et oriuntur aut efficiuntur.'

This is a short discourse, contained in two pages of the manuscript, tending to shew the analogy between the seven planets and the chords included in the musical septenary. The doctrine of the music of the spheres, and the opinion on which it is founded, has been mentioned in the account herein before given of Pythagoras. Those who first advanced it have not been content with supposing that the celestial orbs must in their several revolutions produce an harmony of concordant sounds; but they go farther, and pretend to assign the very intervals arising from the motion of each. This the author now citing has done, and perhaps following Pliny, who asserts it to be the doctrine of Pythagoras, he says that in the motion of the Earth F is made, in that of the moon A, Mercury B, Venus C, the Sun D, Mars E, Jupiter F, and Saturn g. And that here the musical measure is truly formed.

Next follows a very short tract, with the name Kendale at the conclusion of it. It contains little more than the Gamma, vulgarly called the Gamut, or Guidonian scale, and some mystical verses on the power of harmony, said to be written by a woman of the name of Magdalen. It should seem that Kendale was no more than barely the transcriber of this tract, for the rubric at the beginning ascribes it to a certain monk of Sherborne, who professes to have taken it from St. Mary Magdalen.

'Monachus quidam de Sherborne talem Musicam profert de Sancta Maria Magdelene.'

Next follows a tract entitled 'De Origine et Effectu Musicae,' in four sections, the initial words whereof are 'Musica est scientia recte canendi, sive scientia de numero relato ad sonum,' wherein the author, after defining music to be the science of number applied to sound, gives his reader the choice of two etymologies for the word music. The one from the Muses, the other from the word Moys, signifying water, which he will have to be Greek. He then proceeds, but rather abruptly, to censure those who through ignorance prolate semitones for tones, in these words: 'Many now-a-days, when they ascend from RE by MI, FA, SOL, scarce make a semitone between FA and SOL; moreover, when they pronounce SOL, FA, SOL, or RE, UT, RE, prolate a semitone for a tone; and thus they confound the diatonic genus, and pervert the plain-song. Yet these may be held in some measure excusable, as not knowing in what genus our plain-song is constituted; and being asked for what reason they thus pronounce a semitone for a tone, they alledge they do it upon the authority of the singers in the chapels of princes, who, say they, would not sing so without reason, as they are the best singers. So that being thus deceived by the footsteps of others, they one

'after another follow in all the same errors. Where are others who will have it that this method of singing is sweeter and more pleasing to the ear, and therefore that method being as it were good, should be made use of. To these Boetius answers, saying 'all credit is not to be given to the ears, but some also to reason, for the hearing may be deceived. So also is it said in the treatise De quatuor Principium, cap. lvi., and as a proof thereof, it is farther said that those who follow hunting are more delighted with the barking of the dogs in the woods, than with hearing the office of God in the church. Reason, however, which is never deceived, shews the contrary.'

Sect. II. entitled De tribus Generibus melorum, treats of the three genera of melody, but contains nothing that has not been better said by others.

Sect. III. entitled Inventores Artis Musicae equeformis, contains an account of the inventors of the musical art, by much too curious to be given in any other than the author's own words, which are these:—

'There was a certain smith, Thubal by name, who regulated the consonances by the weights of three hammers striking upon one anvil. Pythagoras hearing that sound, and entering the house of the smith, found the proportion of the hammers, and that they rendered to each other a wonderful consonance. When Thubal heard and knew that God would destroy the world, he made two pillars, the one of brick and the other of brass, and wrote on each of them the equiformal musical art, or plain cantus; that if the world should be destroyed by fire, the pillar of brick might remain, as being able to withstand the fire; or if it were to be destroyed by water, the brazen pillar might remain till the deluge was subsided. After the deluge king Cyrus, who was king over the Assyrians, and Enchiridias, and Constantinus, and after these Boetius, beginning with the proportion of numbers, demonstrated the consonances, as appears by looking into the treatise of the latter, De Musica. Afterwards came Guido the monk, who was the inventor of the Gamma, which is called the Monochord. He first placed the notes in the spaces between the lines, as is shewn in the beginning of this book. Afterwards Guido de Sancto Mauro, and after these Guido Major and Guido Minor. After these Franco, who shewed the alterations, perfections, and imperfections of the figures in the Cantus Mensurabilis, as also the certitude of the beginnings. Then Philippus Vitriaco, who invented that figure called the Least Prolation, in Navarre. Afterwards St. Augustine and St. Gregory, who instituted the equiformal cantus throughout all the churches. After these Isidorus the etymologist, and Joannes De Muris, who wrote ingenious rules concerning the measure and the figuration of the cantus, from whence these verses:—

'Per Thubal inventa musarum sunt elementa.
'Atque collumellis nobis exempta gemellis.
'Et post diluvium tunc subscriptus perhibetur:
'Philosophus princeps pater Hermes hic Trismegistus
'Invenit Musas quas dedit et docuit.

- 'Pictagoras tum per martellas fabricantum,
- 'Antea confusas numerantur tetrarde musas.
- 'Quem Musis generat medium concordia vera
- 'Qui tropus ex parte Boicius edidit.
- 'Unum composuit ad gamma vetus tetrachordum.
- 'Et dici meruit fuisse Guido monochordum
- 'Gregorius musas primo carnalitur usas,
- 'Usu sanctorum mutavit Basilicarum.
- 'Ast Augustinus formam fert psalmodizandi,
- 'Atque chori regimen Bernardus Monachus offert,
- 'Ethimologiarum statuit coadjutor Isidorus
- 'Pausas juncturas, facturas, atque figuras;
- 'Mensuraturam formavit Franco notarum,
- 'Et John De Muris, variis floruitque figuris.
- 'Anglia cantorum nomen gignit plurimorum.*

Sect. IV. entitled *De Musicæ instrumentali et ejus Inventoribus*, gives first a very superficial account of the inventors of some particular instruments, among whom two of the nine Muses, namely, Euterpe and Terpsichore, are mentioned; the first as having invented the Tuba, [trumpet] and the other the Psalterium. This must appear to every one little better than a mere fable; but the author closes this account with a positive assertion that the Tympanum, or drum, was the invention of Petrus de Sancta Cruce.

In this chapter the author takes occasion to mention what he terms the *Cantus Coronatus*, called also the *Cantus Fractus*, which he defines to be a cantus tied to no degrees or steps, but which may ascend and descend by the perfect or imperfect consonances indifferently. This seems to be the reason for calling it the *Cantus Fractus*. That for calling it *Cantus Coronatus* is that it may be crowned, namely, that it may be sung with a *Faburden*, of which hereafter.

What follows next is a very brief and immethodical enumeration of the measures of verse, the names of the characters used in the *Cantus Mensurabilis*, and of the consonances and dissonances, with other matters of a miscellaneous nature: among these are mentioned certain kinds of melody, namely *Roundellas*, *Balladas*, *Carollas*, and *Springas*; but these the author says are fantastic and frivolous, adding, that no good musical writer has ever thought it worth while to explain their texture.

The next in order of succession to the treatise *De Origine et Effectu Musicæ*, is a tract entitled *Speculum Psallentium*, in which is contained the Formula of St. Gregory for singing the offices, together with certain verses of St. Augustine to the same purpose, and others of St. Bernard on the office of a precentor; the formula of St. Gregory is as follows:—

'Uniformity is necessary in all things. The metre with the pauses must be observed by all in psalmodizing; not by drawing out, but by keeping up the voice to the end of the verse, according to the time. Let not one chorus begin a verse of a psalm before the other has ended that preceding it. Let the pauses be observed at one and the same time by all; and let all finish as it were with one voice;

* The three last lines of the above verses are additional evidence in favour of two positions that have been uniformly insisted on in the course of this work, to wit, that Franco, and not De Muris, was the inventor of the *Cantus Mensurabilis*, and that De Muris was not a Frenchman, but a native of England.

'and, reassuming breath, begin together as one mouth; and let each chorus attend to its cantor, that, according to the precept of the blessed apostle Paul, we may all honour the Lord with one voice. And, as it is said the angels are continually singing with one voice, Holy, Holy, Holy; so ought we to do without any remission, which argues a want of devotion: whence these verses of St. Augustine for the form of singing Psalms:—

- 'Tedia nulla chori tibi sint, assiste labori,
- 'Hora sit ire foras postquam compleveris horas,
- 'Egressum nobis ostendunt perniciosum
- 'Dyna, Chaim, Corius, Judas, Esau, Semeique,
- 'Psallite devotè, distinctè metra tenetè,
- 'Vocibus estote concordæ, vana canetè,
- 'Nam vox frustratur, si mens hic inde vagatur,
- 'Vox sæpe quassatur, si mens vana meditatè.
- 'Non vox, sed votum; non musica, sed cor
- 'Non clamor, sed amor sonat in aure Dei.
- 'Dicendis horis adsit vox cordis, et oris.
- 'Nunquam posterior prius incipiat,
- 'Ni suus anterior perfecto fine fruatur.'

The verses of St. Bernard have the general title of *Versus Sancti Bernardi*; they consist of three divisions, the first is entitled—

'De Regimine Chori et Officio Precentoris.

- 'Cantor corde chorum roga, cantum lauda sonorum,
- 'Concors Psalmodia, simul ascultanda sophia;
- 'Præcurrat nullus, nec post alium trahat ullus,
- 'Sed simul incipere, simul et finem retinere,
- 'Nulli tractabunt nimis, aut festive sonabunt,
- 'Vive sed et munda cantabunt voce rotunda
- 'Versus in medio, bona pausa sit ordine dicto,
- 'Ultima certetur, brevior quam circa sonetur.
- 'Ultima dimissa tibi syllaba sit quasi scissa,
- 'Ars tum excipiat si scandens ultima fiat,
- 'Tunc producat monosyllaba, sique sequatur,
- 'Barbara (si sequitur producta) sonans reperitur.

'Detestatio contra perverse psallentes.

- 'Qui psalmos resecant qui verba recissa volutant
- 'Non magis illi ferent quam si male lingue tacerent
- 'Hi sunt qui psalmos corrumpunt nequiter almos.
- 'Quos sacra scriptura damnat, reprobant quoque jura
- 'Janglers, cum Japers, Nappers, Galpers quoque Dralbers
- 'Momlers, Forskippers, Ourenners, sic Ourhippers,
- 'Fragmina verborum Tuttrivillus colligit horum.

'De septem misteriis septem horarum canonicarum.

- 'Hinc est septenis domino cur psallimus horis;
- 'Prima flagris cedit, adducit tertia morti,
- 'Sexta legit solem sed nona videt morientem,
- 'Vespera deponit, stravit completa sepultum;
- 'Virum nox media devicta morte revelat
- 'Si cupis intentam psallendi reddere vocem,
- 'Crebro crucem pingas, in terram lumina figas,
- 'Observate preces, et ne manus aut caput aut pes
- 'Sit motus, pariter animi cum corpore pungas. †

† The above verses, as they are descriptive of the state of church-music, and the manner of singing the choral offices in the time of St. Bernard, who lived in the twelfth century, are matter of great curiosity. They may be said to consist of three parts or divisions: the first is an exhortation to the precentor to govern the choir with resolution, and to encourage those who sing to sing the cantus audibly, not wantonly, with a clear round voice. The second part, entitled *Detestatio contra perverse Psallentes*, is an execration on such as in their singing corrupt the Psalms and other offices. And it seems by the context that the performance of the choral service was not confined to the clerks and officers of the choir, but that a lewd rabble of lay singers bore a part in it, and were the authors of the abuses above complained of. These men are

The next tract has for its title *Metrologus*, which any one would take to mean a discourse on metre; but the author explains it by the words *Brevis Sermo*, which had certainly been better expressed by the word *Micrologus*, a title very commonly given to a short discourse on any subject whatever. Guido's treatise bearing that name has been mentioned largely in its place; and an author named Andreas Ornithoparcus has given the same title to a musical tract of his writing, which was translated into English by our countryman Douland, the lutenist, and published in the year 1609.

This author says of music, that it is so called as having been invented by the Muses, for which he cites Isidore.

Under the head *De Inventoribus Artis Musicae*, he explodes the opinion that Pythagoras invented the consonances; for he roundly asserts, as indeed one of the authors before-cited has done, that Tubal first discovered them. The following are his words:—

'The master of history [*i. e.* Moses] says that Tubal was the father of those that played on the cithra and other instruments; not that he was the inventor of those instruments, for they were invented long after; but that he was the inventor of music, that is of the consonances. As the pastoral life was rendered delightful by his brother, so he, working in the smith's art, and delighted with the sound of the hammers, by means of their weights carefully investigated the proportions and consonances arising from them. And because he had heard that Adam had prophesied of the two tokens, he, lest this art, which he had invented, should be lost, wrote and engraved the whole of it on two pillars, one of which was made of marble, that it might not be washed away by the deluge, and the other of brick, which could not be dissolved by fire: and Josephus says that the marble one is still extant in the land of Syria. So that the Greeks are greatly mistaken

distinguished by the strange appellations of Janglers, Japers, Nappers, Galpers, Dralbers, Momlers, Forkippers, Ourmeners, and Ourhippers, for the signification whereof St. Bernard, the author, refers to a writer named Tuttilvillus; but as his work is not now to be found, it remains to see what assistance can be derived from lexicographers and etymologists towards ascertaining the meaning of these very strange terms.

And first Janglers seems to be a corruption of *Jongleours*, a word which has already been shown to be synonymous with minstrels. Japers are clearly players, *Hariones*. Skinner, *Vox Jape*. Nappers are supposed to be drinkers, from *NAPPE*, the Saxon term for a cup. Benson's Saxon Vocabulary. For Galpers it is difficult to find any other meaning than Gulpers, *i. e.* such as swallow large quantities of liquor, from the verb *GULP*; and for this sense we have the authority of the vision of Pierce Plowman, in the following passage, taken from the *Passeus Quintus* of that satire:—

There was laughing and louting, and let go the cuppe,
And so fitten they to even fong, and fongen other while
Till Gloton had igalped a gallon and a gill.

Dralbers may probably be from the word *Drab*. Momlers may signify Talkers, Praters in the time of divine service, from the verb *MUMBLE*, to talk, which see in Skinner. Forkippers may be Fair skippers, *i. e.* dancers at fairs. For Ourmeners and Ourhippers no signification can be guessed at; nor does it seem possible to ascertain, with any degree of precision, the meaning of any of the above words, without the assistance of the book from which they were taken: and supposing none of the above interpretations to hold, there is nothing to rest on but conjecture; and one of the most probable that can be offered seems to be this, that the above are cant terms, invented to denote some of the lowest class of minstrels, whose knowledge of music had procured them occasional employment in the church.

The third division of these verses of St. Bernard is entitled '*De septem Misteriis, septem Horarum canonicarum*,' and gives directions to singers to cross themselves, and perform other superstitious acts at the canonical hours.

'in ascribing the invention of this art to Pythagoras, the philosopher.'

What follows is chiefly taken from the *Micrologus* of Guido de Sancto Mauro: that the author means Guido Aretinus there cannot be the least doubt, for some whole chapters of the *Micrologus* are in this tract inserted verbatim.

Next follow memorial verses for ascertaining the dominants and finals of the ecclesiastical tones; a relation of the discovery of the consonances by Pythagoras; remarks on the difference between the graves, the acutes, and superacutes, and on the distinction between the authentic and plagal modes, manifestly taken from the *Micrologus*; for it is here said, as it is there also, that there are eight tones, as there are eight Parts of Speech, and eight Forms of Blessedness.

CHAP. LVI.

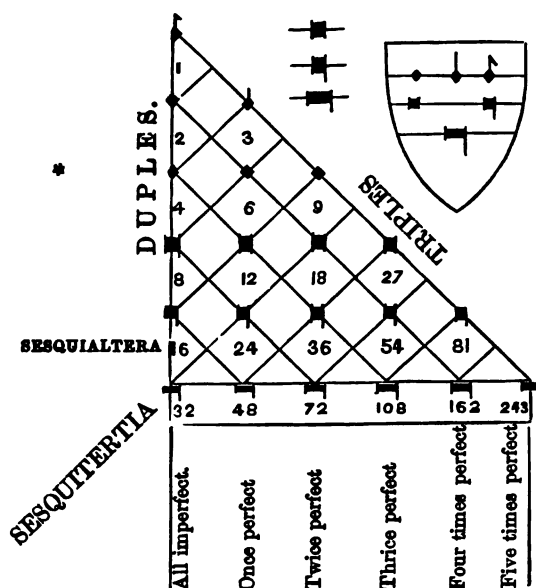
NEXT follows a tract with this strange title, '*Distinctio inter Colores musicales et Armorum Heroum*,' the intent whereof seems to be to demonstrate the analogy between music and coat armour. The author's own words will best show how well he has succeeded in his argument; they are as follow:—

'The most perfect number is sixteen, because it may always be divided into two equal parts, as 16, 8, 4, 2. There are six natural colours, from which all the other colours are compounded. First, the colour black, secondly white, thirdly red or ruddy, fourthly purple, fifthly green, sixthly fire-red. The colour black is in arms called sable; white, silver; red, gules; green, vert; fire-red, or; thus called in cantus in order as they stand—

Black is the worst	In Music.	Sable is the best and most	In Arms.
White better than black		Silver second [benign]	
Red better than white		Gules third	
Purple better than red		Azure fourth	
Green better than purple		Vert fifth	
Fire-red better than green	In Arms.	Gold sixth	In Music.
Fire-red is the worst colour		Gold is the first and most	
White - - - better		Silver second [benign]	
Red - - - better		Gules third	
Purple - - - better		Azure fourth	
Green - - - better	In Music.	Green fifth	
Black - - - better		Sable worst	

'The musical colours are six; the principal of which is gold, the second silver, the third red, the fourth purple, the fifth green, the sixth black; an equal proportion always falls to the principal colour, which is therefore called the foundation of all the colours; and it is called the principal proportion, because all the unequal proportions may be produced from it.' This to the intelligent reader must appear to be little better than stark nonsense, as is indeed almost the whole tract, which therefore we hasten to have done with.

This fanciful contrast of the colours in arms with those in music, is succeeded by the figures of a triangle and a shield thus disposed:—



The next tract in order has for its title 'Declaratio trianguli superius positi et figure de tribus primis figuris quadratis et earum speciebus, ac etiam scuti per Magistrum Johannem Torkesey;' which declaration translated is in the following words:—

'In order to attain a perfect knowledge of mensurable music, we should know that to praise God, three and one, there are three species of square characters, from whence are formed six species of simple notes. In the greatest square consists only one species, which is called a large; and from the mediation of that square there are made two species, namely, a breve and a long; from the upper square are made three species, namely, the semibreve, minim, and simple; from what has been said it appears that no more species could be conveniently assigned. All these are found in the small figure of the three squares, and in the shield of the six simple notes.'

The author then goes on with an explanation of the above six species of notes, and their attributes of perfection and imperfection, wherein nothing is observable, except that the smallest note, which is in value half the minim, is by him called a Simple; its

* Notwithstanding the explanation which immediately follows the two foregoing figures, it seems necessary to mention in this place, that the first column of numbers contains a series of duple ratios, which are called imperfect, the attribute of perfection being by all musical writers ascribed to the number 3. The next series of numbers which have a diagonal progression from right to left, are triple ratios, and are therefore said to be perfect: the others in succession are also said to be once, twice, thrice, and so on, perfect, in respect of their distance from the column of duples; for example, the number 24, being but once removed from 3, is said to be once perfect; whereas 36, which is twice removed from 3, is said to be twice perfect; and so of the rest.

The first line of numbers below the base of the triangle is a series of numbers in sesquialtera proportion, as 32, 48, 72, 108, 162, 243, in which each succeeding number contains the whole and a half of the former. Those in a diagonal progression from left to right are in sesquitercia proportion, as to take one line only for an example, 32, 24, 18: in which order each preceding number contains four of those equal parts, three of which compose the succeeding ones, for instance, 24 is three fourths of 32, and 18 has the same ratio to 24.

As to the shield it is a poor conceit, and contains nothing more than the six characters used in the Cantus Mensurabilis, which might have been disposed in any other form; and as to the representation of the three first square figures, it speaks for itself.

value is a crotchet, but its character that of a modern quaver.

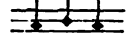
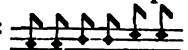
A table of the ratios of the consonances and dissonances, with their several differences, follows next in order, after which occur a few miscellaneous observations on descant, among which is this rule:—

'It is to be known that no one ought to make two concordances the one after the other.'

This, though a well-known rule in composition, is worthy of remark, and the antiquity of it may be inferred from its occurring in this place.

The above explanation of the shield and triangle, with the several matters above-enumerated, subsequent thereto, are followed by a tract entitled *Regule Magistri Johannis De Muris*, which, though it seems to carry the appearance of a tract written by De Muris himself, is in truth but an abridgment of his doctrine touching the *Cantus Mensurabilis*, together with that of the ligatures, which most writers seem to agree were an improvement on the original invention.

The rules contained in this discourse are not only to be met with in most of the tracts before cited, but in every book that professes to treat of mensurable music. We however learn from it that originally the minim was not, as now, evacuated, or open at the top, as appears by this author's definition of it:—

'A minim is a quadrangular character resembling a semibreve with a stroke ascending from the upper angle as here  and the simple or crotchet is characterised thus: 

To these rules succeed others of an author hereinbefore named, Thomas Walsyngham, of the same import with those of De Muris, in which nothing material occurs, save that the author complains, that whereas there are but five species of character, namely, the Large, Long, Breve, Semibreve, and Minim, the musicians of his time had added a sixth, namely, the Crotchet, which he says would be of no use, would they but observe that beyond the minim there is no right of making a division.

Here it may not be amiss to observe, that neither of the names Johannes Torkesey, nor Thomas Walsyngham occur in Leland, Bale, or Pits, or in any other of the authors who profess to record the names and works of the ancient English writers. It is true that bishop Tanner, in his *Bibliotheca*, pag. 752, has taken notice of the latter, but without any particular intimation that he was the author of the tract above ascribed to him: and it is farther to be noted that not one of the tracts contained in this manuscript of Waltham Holy Cross is mentioned or referred to in any printed catalogue of manuscripts now extant.

Next follow two tracts on the subject of descant, the first by one Lyonel Power, an author whose name occurs in the catalogue at the end of Morley's Introduction, the other by one Chilston, of whom no account can be given. As to the tracts themselves, they are probably extant only in manuscript. They are of great antiquity; for the style and orthography of them both, render it probable that the authors

were among the first writers in the English language on this subject; at least if we compare their respective works with the prose works of Chaucer and Lydgate, we shall find very little reason to think they were written a great while after the time when the latter of those authors lived.

Power tells his reader that 'his tretis is contynued upon the gamme for hem that wil be syngers, or makers, or techers;' and as to what he says of descant it is here given in his own words:—

'For the first thing of alle ye must kno how many cordis of discant ther be. As olde men sayen, and as men syng now-a-dayes, ther be nine; but whoso wil syng mannerli and musikili, he may not lepe to the fyfteenth in no maner of discant; for it longith to no manny's voys, and so ther be but eyght accordis after the discant now usid. And whosoever wil be a maker, he may use no mo than eyght, and so ther be but eyght fro unison unto the thyrteenth. But for the quatribil syghte ther be nyne accordis of discant, the unison, thyrd, fyfth, syxth, eyghth, tenth, twelfth, thyrteenth, and fyfteenth, of the which nyne accordis, fyve be perfyte and fower be imperfyte. The fyve perfyte be the unison, fyfth, eyghth, twelfth, and fyfteenth; the fower imperfyte be the thyrd, syxth, tenth, and thyrteenth: also thou maist ascende and descende wyth all maner of cordis excepte two accordis perfyte of one kynde, as two unisons, two fyfths, two eyghths, two twelfths, two fyfteenths, wyth none of these thou maist neyther ascende, neyther descende; but thou must consette these accordis togeder, and medele* hem wel, as I shall enforme the. Ferst thou shall medele wyth a thyrd a fyfth, wyth a syxth an eyghth, wyth an eyghth a tenth, wyth a tenth a twelfth, wyth a thyrteenth a fyfteenth; under the which nyne accordis three syghtis be conteynyed, the mene syght, the trebil syght, and the quatribil syght: and others also of the nyne accordis how thou shalt hem ymagyne betwene the playn-song and the discant here folloeth the ensample. First, to enforme a chyld in hys counterpoynt, he must ymagyne hys unison the eyghth note fro the playn-song, benethe hys thyrd; the syxth note benethe hys fyfth; the fowerth benethe hys syxth; the thyrd note benethe hys eyghth, even wyth the playne-song; hys tenth the thyrd note above, hys twelfth the fyfth note above, hys thyrteenth the syxth above, hys fyfteenth the eyghth note above the playne-song.'

The conclusion of this discourse on the practice of descant is in these words:—

'But who wil kenne his gamme well, and the imaginations therof, and of hys acordis, and sette his perfyte acordis wyth his imperfyte accordis, as I have rehersed in thys tretise afore, he may not faile of his counterpoynt in short tyme.'

The latter of the two tracts on descant above-mentioned, viz., that with the name of Chilston, is also part of the manuscript of Waltham Holy Cross: it immediately follows that of Lyonel Power, and is probably of little less antiquity. There is no

possibility of abridging a discourse of this kind, and therefore the most material parts of it are here given in the words of the author. The following is the introduction:—

'Her followth a litil tretise according to the first tretise of the syght of descant, and also for the syght of conter, and for the syght of the contirtenor, and of Faburdon.'

To explain the sight of descant the author first enumerates the nine accords mentioned in the former tract; distinguishing them into perfect and imperfect, and then proceeds to give the rules in the following words:—

'Also it is to wete that ther be three degreis of descant, the quatreble sighte, and the treble sighte, and the mene sighte. The mene begynneth in a fifth above the plain-song in voys, and with the plain-song in sighte. The trebil begynneth in an eyghth above in voise, and with the plaine-song in sighte. The quatreble begynneth in a twelfth above in voise, and wyth the playne-song in sighte. To the mene longith properli five accordis, scil. unyson, thyrd, fyfth, syxth, and eyghth. To the treble song longith properli fyve accordis, scil. fyfth, syxth, eyghth, tenth, and twelfth. To the quatreble longith properli five accordis, scil. eyghth, tenth, twelfth, thyrteenth, and fyfteenth. Furthermore it is to wete that of al the cords of descant sume be above the playne-song, and sume benethe, and sume wyth the playne-song. And so the dicaster of the mene shal begyne hys descant wyth the plain-song in sighte, and a fyfth above in voise; and so he shal ende it in a fyfth, havyng next afore a thyrd, yf the plain-song descende and ende downward, as FA, MI, MI, RE, RE, UT; the second above in sight is a sixth above in voise; the thyrd benethe in sighte is a thyrd above in voise; the fowerth above in sighte is an eyghth above in voise; the syxth above in sight is a tenth above in voise, the wheche tenth the descaster of the mene may syng yf the plain-song go low; neverthelesse ther long no mo accordis to the mene but fyve, as it is aforseide.'

The above are the rules of descant, as they respect that part of the harmony, by this and other authors called the Mene. He proceeds next to give the rules for the treble descant, and after that for the quadribil.

By these latter we learn that the mean descant must be sung by a man, and the quadribil by a child.

Afterwards follow these general directions:—

'Also yt is to knowe whan thou settist a perfite note ayenst a FA, thou must make that perfite note a FA, as MI, FA, SOL, LA; also it is fayre and meri singing many imperfite cordis togeder, as for to sing three or fower or five thyrdys togeder, a fyfth or a unyson next aftir. Also as many syxts next aftir an eyghth; also as many tenths nexte aftir a twelfth; also as many thirteenths nexte aftir a fyfteenth: this maner of syngyng is mery to the synger, and to the herer.'

And concerning the practice of Faburden, mentioned in the title of his tract, the author above-cited has these words:—

* f. a. Mingle.

'For the leest processe of sightis natural and most in use is expedient to declare the sight of Faburdun, the whech hath but two sightis, a thyrd above the plain-song in sight, the wheche is a syxt fro the treble in voice; and even wyth the plain-song in sight, the wheche is an eyghth from the treble in voise. These two acordis of the Faburden must rewle be the mene of the plain-song, for whan he shal begin his Faburdun he must attende to the plain-song, and sette hys sight evyn wyth the plain-song, and his voice in a fyfth benethe the plain-song; and after that, whether the plain-song ascende or descende, to sette his sight alwey both in reule and space above the plain-song in a thyrd; and after that the plain-song haunteth hys course eyther in acutes, fro *G SOL RE UT* above, to *G SOL RE UT* benethe, to close dunward in sight, evyn upon the plain-song, upon one of these keyes, *D LA SOL RE*, *C SOL FA UT*, *A LA MI RE*, or *G SOL RE UT* benethe. And yf the plain-song haunt hys course from *G SOL RE UT* benethe, downe towarde *A RE* conveniently, than to see before wher he may close wyth two or three or fower thyrds before, eyther in *F FA UT* benethe, or *D SOL RE*, or *C FA UT*, or *A RE*, and al these closis gladli to be sunge and closid at the laste ende of a word: and as ofte as he wil. to touche the plain-songe and void the fro excepte twies togedir, for that may not be; inasmoche as the plain-song sight is an eyghth to the treble, and a fyfth to the mene, and so to every degree he is a perfite corde; and two perfite acordis of one nature may not be sung togedir in no degree of descant.'

The foregoing treatise on descant of Chilston is immediately followed by another of the same author on proportion, which is thus introduced:—

'Now passid al maner sightis of descant, and with hem wel replesshid, that natural appetite not saturate sufficientli, but ferventli desirith mo musical conclusions, as now in special of proporcions, and of them to have plain informacion, of the whech after myn understanding ye shall have open declaracion. But forasmoche as the namys of hem be more convenientli and compendiusli set in Latin than in English, therefore the namys of hem shal stonde stille in Latin, and as briefly as I can declare the naturis of them in English. First ye shal understand that proporcion is a comparison of two thinges be encheson of numbir or of quantitie, like or unlike eyther to other; so that proporcion is seid in two maner of wyse, scilicet, *Equalitatis* and *Inequalitatis*. Proporcion of *Equalitatis* is whan two evyn thinges be likenyd, either sette togedir in comparison, as 2 to 2, or 4 to 4, and so of others. Proporcion of *Inequalitatis* is whan the more thinge is sette in comparison to the lasse, or the lasse to the more, as 2 to 4, or 4 to 2, or 3 to 5, or 5 to 3; and thys proportion of inequality hath five species or naturis or keendys, whois namys be these in general: 1. *Multiplex*; 2. *Superparticularis*; 3. *Superpartiens*; 4. *Multiplex superparticularis*; 5. *Multiplex superpartiens*. The first spece of every keende of inequality is callid *Multiplex*, that is to

sey manifold, and is whan the more nombre conteynyth the lasse manyfold, as twies 1; and that is callid in special, *Dupla*, id est, twayfold, as 2 to 1, or 4 to 2, or 6 to 3, and so forthe endlesli. Yf the more numbir conteyne thries the lasse, than it is callid in special, *Tripla*, as 3 to 1, 6 to 2, 9 to 3; yf it be four times the lasse containid in the more, than it is *Quadrupla*, as 4 to 1, 8 to 2, 12 to 3, and so forthe. *Quindupla*, *Sexdupla*, *Sepdupla*, *Ocudupla*, and so upward endlesli. As for other keendis, ye shall understand that there be two manere of parties, one is callid *Aliquota*, and another is callid *Non aliquota*. *Pars Aliquota* is whan that partie be ony maner of multiplicacion yeldeth his hole, as whan betwene his hole and him is proporcion *Multiplex*, as a unite is *Pars Aliquota* of every numbir; for be multiplicacion of that, every numbir wexeth twayne: or dualite is *Pars Aliquota* of every evyn numbir; and thus this partie shal be namyd in special after the nombre on whom he is multiplied and yeldeth his hole; for if he yeldeth his hole be multiplicacion of 2, it is callid *Altera*, one halfe; and yf he yeldeth his hole be multiplicacion of three, it is called *Tertia*, in the third part; *Sequitur exemplum*, two is the thirde part of 6, and 3 of 9, and 4 of 12; and yf he yeldeth his multiplicacion be 4, than it is called *Quarta*, as 2 for 8, for 4 tymys 2 is 8; and if it yeldith his hole be multiplicacion of 5, than it is callid *Quinta*, and of 6 *Sexta*, and so forth endlesli. *Pars non aliquota* is whan that partie be no maner of multiplicacion may yelde his hole, as 2 is a parte of 5; but he is non aliquota, for howsoever he be multiplied he makith not evyn 5, for yf ye take him twies he makith but 4; and if ye take him thries he passith and makith 6. *Proportio superparticularis* is whan the more numbir conteynyth the lasse; and moreover a party of him that is *Aliquota*, and after the special name of that Parties shal that proporcion be namid in special, as betwene 6 and 4 is *Proporcio sesquialtera*; *Ses* in Greek, *Totum* in Latin, al in Englishe, so *Sesquialtera* is for to sey al and a halfe, for the more numbir conteynyth al the lasse, and halfe thereof more over. Betwene 8 and 6 is proportion *Sesquitercia*, for the more numbir conteynyth the lasse, and hys thyrd part over. Betwene 10 and 8 is *sesquiquarta*, betwene 12 and 10 is *sesquiquinta*, betwene 14 and 12 is *sesquisexta*, et sic infinitè. *Proporcio superparciens* is whan the more numbir conteynyth the lasse; and moreover the whech excesse eyther* *superplus* is not *Pars aliquota* of the lasse numbir, as betwene 5 and 3. But than thou must loke to that excesse whan the more number passith the lasse, and devyde it into sweche parties that be aliquota; and loke how many there be thereof, and what is her special namys, and whether they be thyrd, fowerth, or fyfthe, and so forthe. And yf ther be two parties aliquota, than thou shalt sey in special *Superbiparciens*; and yf ther be three, *supertriparciens*; and yf ther be four, *superquartiparciens*, and so forthe. And farthermore the parties that be tercie, than thou shalt sey alwey at last ende, *Tercias*; and yf ther be four

* Eyther for or, in this and many other places through this quotation.

'Quartas, and so forth endlessli. Sequitur exemplum, 'betwene 5 and 3 is proporcion Superbiparciens terci-
'as, for the more number conteynyth the lasse, and
'two parties over that be tercié; but they both
'togedir be not pars aliquota of the lasse number;
'betwene 7 and 5 is Superbiparciens quintas; be-
'twene 7 and 3 is Dupla sesquitercias; betwene 9
'and 5 is Superquartiparciens quintas; betwene 10
'and 6 is Superbiparciens terciás: and loke ye take
'goode hede that ye devyde the excesse into the
'greatest parties aliquotas that ye may, as here, in
'this last ensample, 4 is devyded into 2 dualities, that
'beene tercié of six. And take this for a general
'rewle, that the same proportion that is betwene
'twoe smale numberis, the same is betwene her
'doubles and treblis, and quatreblis, and quiblis,
'and so forth endlessli. Sequitur exemplum, the
'same proporcion that is betwene 5 and 3, is betwene
'10 and 6; betwene 20 and 12; betwene 40 and 24;
'betwene 80 and 48, and so forth endlessli. Multi-
'plex superparticularis is whan the more numbir
'conteynyth the lasse, and a partye of him that is
'aliquota; as 5 and 2 is dupla sesquialtera, and so is
'10 and 4; and so is 20 and 8; but 7 and 3 is dupla
'sesquitercia, and so is 14 and 6. Multiplex super-
'parciens is whan the more numbir conteynyth the
'lasse, and the parties that be over aliquota. But
'thei alle togedir be not one parte aliquota, as 8 and
'3 is dupla superbiparciens terciás, and so is 16
'and 6, 32 and 12.

'Here folowyth a breve tretise of proporcions, and
'of their denominacions, with a lital table folwing:—

'The proporcion betwene 1 and 1, 2 and 2, 3 and
'3, and so in more numbir, is callid evyn proporcion,
'for every parcell be himselfe is evyn in nombir, and
'the same.

'Betwene 8 and 4 is callid dowble proporcion, for
'the more nombir conteynyth twice the lasse. Be-
'twene 5 and 4 is Sesquiquarta, for the more numbir
'conteynyth the lasse, and the fourthe parte of him
'over. Betwene 5 and 3 is Superbiparciens terciás,
'for the more numbir conteynyth the lasse, and 2 par-
'ties over, of the whch eche be himselfe, is the thyrd
'parte of the lasse. Betwene 14 and 4 is dupla ses-
'quialtera, for the more numbir conteynyth thries the
'lesse, and the halfe over.* Betwene 8 and 3 is dupla
'superbiparciens terciás, for the more numbir con-
'teynyth twies the lasse, and his two parties over;
'of the whch Pars aliquota is not made be the lesse
'numbir, but ech be himselfe is the thyrd parte of
'the lesse numbir. Betwene 3 and 2 is Sesquialtera,
'for the more numbir conteynyth the lesse, and the
'halfe of him over; betwene 4 and 3 is Sesquitercia,
'for the more numbir conteynyth the lasse, and thries
'one parte over, the whch is the thyrd parte of the
'lesse numbir. Betwene 6 and 2 is Tripla, for the
'more numbir conteynyth thries the lesse numbir.
'Betwene 6 and 3 is Dupla, for the more numbir con-
'teynyth twies the lesse. Betwene 3 and 1 is Tripla,
'ut supra. Betwene 5 and 2 is Dupla Sesquialtera,
'for the more numbir conteynyth twies the lesse, and
'the halfe parti of him over. Betwene 6 and 5 is

'Sesquiquinta, for the more numbir conteynyth thries
'the lasse, and his fifth part over. Betwene 7 and
'2 is Tripla Sesquialtera, for the more numbir con-
'teynyth thries the lasse, and halfe him over. Be-
'twene 7 and 3 is Sesquitercia, ut supra. Betwene
'8 and 5 is Supertriparciens quintas, for the more
'numbir conteynyth the lasse, and three parties over,
'of the whch pars aliquota is not made. Betwene
'9 and 2 is Quadrupla Sesquialtera, for the more
'numbir conteynyth the lesse, [four times] and his
'halfe over.'

Then follow two tables of the proportions in
figures, in no respect different from those that are to
be met with in Salinas, Zarlino, Mersennus, Kircher,
and other writers, for which reason they are not
here inserted.

'Thus over passid the reulis of proporcions, and
'of their denominacions, now shal ye understonde
'that as proporcion is a comparison betwene diverse
'quantiteis or their numbris, so is Proporcionalitas
'a comparison eyther a likeness be 2 proporcions
'and 3 diverse quantiteis atte last, the whch
'quantiteis or numbris been callid the termis of
'that proporcionalite; and whan the ferst terme
'passith the seconde than it is callid the ferst ex-
'cesse; and whan the seconde terme passith the
'thyrd, than it is callid the seconde excesse: so ther
'be 3 maner of proporcionalities, sc. Geometrica,
'Arithmetica, and Armonica. Proporcionalitas Geo-
'metrica is whan the same proporcion is betwene
'the ferst terme and the seconde, that is betwene the
'second and the thyrd; whan al the proporcions be
'like, as betwene 8, 4, 2, is Proporcionalitas Geo-
'metrica; for proporcion dupla is the ferst, and so is
'the seconde; 9 to 6, 6 to 4 Sesquialtera; 16 to 12,
'12 to 9 Sesquitercia; 25 to 20, 20 to 16 Sesqui-
'quarta; 36 to 30, 30 to 25 Sesquiquinta, and so forth
'upward, encreasing the numbir of difference be one.
'The numbir of difference and the excesse is all one.
'Whan the ferst numbir eyther terme passith the
'seconde, eyther the seconde the thyrd, than after
'the lasse excesse or difference shall that proporcion
'be callid bothe the ferst and the seconde, as 9, 6, 4;
'the lasse difference is 2, and aliquota that is namyd
'be 2, is callid the seconde or altera: put than to
'the excesse or difference one unite more, and that is
'the more difference, and the twayne proporcions be
'than bothe callid Sesquialtera. Than take the most
'numbir of the three termys, and increse a numbir
'above what the more difference that was before,
'than hast thou 9 and 12, whois difference is 3.
'Encrease than the more numbir be 3, and one unite,
'scil. be 4, than hast thou 16. So here be 3, 9, 12,
'16, in proporcionalite Geometrica, wherof bothe
'porcions be called Sesquitercia, after the lesse
'difference. Werk thus forthe endlessli, and thou
'shal finde the same Sesquisexta, Sesquiseptima,
'Sesquioctava, Sesquinona, Sesquidecima, Sesqui-
'undecima.

'Another general reule to fynde this proporcion-
'alite that is callid Geometrica is this, take whch
'2 numbris that thou wilt that be immediate, and
'that one that passith the other be one unite, mul-

* Quare, if not Triple sesquialtera, for the reason above.

'tiple the one be the other, and every eche be himselfe, and thou shalt have 3 termys in proporcion-
'alite Geometrica, and eyther proporcion shal be
'namyd in general, Superparticularis, be the lasse
'numbir of the 2, that thou toke ferst. Exemplum,
'as 3, 4; multiplie 3 be himselfe, and it makith 9;
'multiply 3 be 4, and it makith 12; multiplie 4 be
'himselfe and it makith 16; than thus thou hast 3,
'9, 12, 16, in proporcionalite Geometrica, and thus
'thou shalt finde the same, what 2 numbris immediate
'that ever thou take.

'And take this for a general reule in this maner
'proporcionalite, that the medil terme multiplied be
'himselfe is neyther mo ne lesse then the two ex-
'tremyteis be, eche multiplied be other: exemplum,
'12 multiplied be himselfe is 12 tymes 12, that is 144,
'and so is 9 tymes 16, or 16 tymes 9, that is al one.
'And this reule faylieth never of this maner propor-
'cionalite in no maner of keende of proporcion, assay
'whoso wil. Proporcionalitas Arithmetica is whan
'the difference or the excesse be like 1, whan the
'more numbir passith the seconde as moche as the
'seconde passith the thyrd, and so forthe, yf ther be
'mo termys than 3, exemplum 6, 4, 2. The first
'excesse or difference is 2 between 6 and 4, and thus
'the seconde between 4 and 2. Proporcionalitas
'Armonica is whan there is the same proporcion be-
'twene the first excesse or difference and the seconde
'that is between the first terme and the thyrd, ex-
'emplum, 12, 8, 6. Here the firste difference
'between 12 and 8 is 4; the seconde between 8 and
'6 is 2; than the same proporcion is between 4 and 2
'that is between 12 and 6, for eyther is proporcion
'dupla. These 3 proporcionalites Boys* callith
'Medietates, i. e. Midlis, and thei have these namis,
'Geometrica, Arithmetica, Armonica. As for the
'maner of tretting of these 3 sciences, Gemetrye
'tretith of lengthe, and brede of londe; Arithmetike
'of morenesse and lannesse of numbir; Musike of
'the highness and lounesse of voyse. Than whan
'thou biddest me yefe the a middle between 2 num-
'bris, I may aske the what maner of middle thou wilt
'have, and after that shal be the diversite of myn
'answer; for the numbris may be referrid to lengthe
'and brede of erth, or of other mesore that longith
'to Geometrie; eyther thei may be considered as
'they be numbir in himselfe, and so they long
'to Arithmetike; eyther thei may be referrid to
'lengthe and shortnesse and mesure of musical in-
'strumentis, the which cause highnesse and lounesse
'of voyse, and so thei long to Armonye and to
'craft of musike: Exemplum of the ferst, i. e.,
'Gemetrye: of 9 and 4 yf thou aske me which is
'the medle by Gemetrye, I sey 6 for this skille;
'yf there were a place of 9 fote long and 4 fote
'brode be Gemetrye, that wer 36 fote square: than
'yf thou bade me yeve the a bodi, or another
'place that wer evyn square, that is callid Quadratum
'equilaterum, wherein wer neythir more space ne
'lesse than is in the former place that was ferst
'assigned, than must thou abate of the lengthe of the
'former place, and eke as moche his brede, so that it

* Boetius.

'be no lengir than it is brode, that must be by pro-
'porcion, so that the same proporcion be betweene the
'lenthe of the former bodi and a syde of the seconde
'that is betweene the same syde and the brede of the
'ferst bodi; and then hast thou the medil betweene
'the lengthe and the bredth of the ferst bodi or place;
'and be that medle a place 4 square that is evyn
'thereto, as in this ensample that was ferst assignyd,
'9 and 4 and 6 is the medil, and as many fote is in
'a bodi or a place that is evyn 4 square 6 fote, as in
'that that is 9 fote longe and 4 fote brode, viz., 36 in
'bothe. The seconde proporcionalite is opin whan
'it is callid the medil be Arithmetike, the which
'trettyth of morenesse and lannesse of numbir, in
'as moche as the more numbir passith the seconde
'be as moche as the seconde passith the thirde.
'Neyther more ne lesse passith 12, 9, than 9 passyth
'6, and therefore 9 is Medium Arithmeticum. The
'thirde proporcionalite is callid Armonica, or a medil
'be armonye for this skille. Dyapason, that is pro-
'porcion dupla, is the most perfite acorde after the
'unison: betweene the extremyteis of the dyapason,
'i. e. the trebil and the tenor, wil be yeven a mydle
'that is callid the Mene, the which is callid Dyapente,
'i. e. Sesquialtera to the tenor and dyatessaron, i. e.
'Sesquitercia to the trebil, therefore that maner of
'mydle is callid Medietas Armonica. Sequitur exem-
'plum: a pipe of 6 fote long, with his competent
'bredth, is a tenor in dyapason to a pipe of 3 fote
'with his competent brede; than is a pipe of 4 fote
'the mene to hem twayne, dyatessaron to the one
'and dyapente to the other. As thou shalt fynde
'more pleyntli in the makying of the monocorde,
'that is called the Instrument of Plain-song, the
'which monocorde is the ferst trettysse in the begyn-
'nyng of this boke, but this sufficith for knowleeg of
'proporcions.'

CHAP. LVII.

THE two foregoing manuscripts, that is to say, that
in the Cotton library, and the other called the Manu-
script of Waltham Holy Cross, above-mentioned
to be the property of Mr. West, are such valuable
treasures of recondite learning, that they would
justify a copious dissertation on the several tracts
contained in them; in the course whereof it might
be demonstrated, that without the assistances which
they afford, it had been extremely difficult to have
traced the history of music through a period of three
hundred years, the darkest in which literature of
most kinds can be said to have been involved. But
as a minute examen of each would too much interrupt
the course of this work, some general remarks on
them in their order, must suffice.

And first of De Handlo's Commentary on the
rules and maxims of Franco. The time when it
was compiled appears to be a little before the feast
of Pentecost, 1326; but it is observable that the
memorandum at the end, which thus fixes the time,
refers solely to De Handlo's tract, and how long the
rules of Franco had existed before the commentary,
is clearly ascertained by the account herein befo-
re given of him and his improvement.

It must be confessed that to carry the invention of the Cantus Mensurabilis so far back as the eleventh century, is in effect to deprive De Muris of the honour of that discovery, and to contradict those many authors who have ascribed it to him; but here let it be remembered, that not one of those who give to De Muris the honour of inventing the Cantus Mensurabilis, has referred to the authority on which their several assertions are founded. Vicentino seems to have been the first of the Italians that speak of De Muris as the inventor of notes of different lengths; and he seems to affect to say more of the matter than it was possible for him to know, considering that he lived near two hundred years after him; for he not only relates the fact, but assigns the motives to, and even the progress of the invention, in terms that destroy the credibility of his relation. As to the other writers that mention De Muris as the inventor of the Cantus Mensurabilis, as namely, Doni, Berardi, Kircher, Mersennus, and many others, they seem to have taken the fact for granted, and have therefore forborne the trouble of such a research as was necessary to settle so important a question; the consequence whereof is, that the evidence of De Muris's claim rests solely on tradition and a series of vague reports, propagated with more zeal than knowledge, through a period of four hundred years.

In opposition to this evidence stands, first, the fact of Franco's having written on the subject of the Cantus Mensurabilis in the eleventh century. Next, the commentary of De Handlo on his rules, extant in the year 1326, which is some years earlier than the pretended invention of De Muris. Next a passage in the succeeding tract entitled *Tractatus diversarum Figurarum*, given at large in its place, and importing that an ingenious method of notation invented by certain ancient masters in the art of music, had been improved by De Muris; so that the characters of the double long, the long, breve, semibreve, and minim, are now made manifest to every one. And lastly, the following passage in the tract '*Pro aliquali notitia de Musica habenda*,' in the Cotton manuscript, '*—non enim erat musica tunc mensurata, sed paulatim crescebat ad mensuram, usque ad tempus FRANCONIS, QUI ERAT MUSICÆ MENSURABILIS PRIMUS AUCTOR APPROBATUS.*'

These evidences may perhaps be deemed decisive of the question, By whom was the Cantus Mensurabilis invented? but others are yet behind: in the manuscript of Waltham Holy Cross are certain verses, in which Franco and De Muris are mentioned together; the former as the Inventor, and the other as the Improver, of the Cantus Mensurabilis:—

Pausas juncturas, facturas, atque figuras;
Mensuratarum formavit Franco notarum,
Et John De Muris, variis floruitque figuris
Anglia cantorum nomen gignit plurimorum.

The premises duly weighed and considered, the conclusion seems most clearly to be, that the opinion so long entertained, and so confidently propagated, namely, that the characters which now, and for several centuries past have been used to signify the different lengths of musical notes, were invented by Johannes

De Muris, is no better than an ill-grounded conjecture, a mere legendary report, and is deservedly to be ranked among those vulgar errors, which it is one of the ends of true history to detect and refute.

The tract beginning '*Pro aliquali notitia de musica habenda*,' contains a great variety of musical learning, extracted chiefly from Boetius and Guido Aretinus; for it is to be noted that the writers of this period carried their researches no farther back than the time of the former, for this obvious reason, that the Greek language was then but little understood, which is in some measure proved by the manner in which this author uses the Greek terms; we are nevertheless indebted to him for the names of many eminent musicians who flourished in or about his time, as also for the honour he has done this country in ranking several persons by name, in different parts of England, among some of the best practical musicians of the age. It is farther to be remarked on this tract, that by the trebles and quadruples, which Perotinus and Leoninus are by him said to have made, we are to understand compositions in three and four parts, and that he has positively asserted of the Cantus Mensurabilis that Franco was the first approved author that wrote on it.

Of the manuscript of Waltham Holy Cross it is to be remarked, that it appears to be a collection of Wylde's making, and that there is reason to believe that the first treatise, consisting of two parts, the one on manual, and the other on tonal music, was composed by Wylde himself. In the latter of these we meet with the term Double Cantus, and an example thereof in the margin, by which is to be understood a cantus of two parts.

Wylde's tract comprehends the precepts of practical music, and may be considered as a compendium of that kind of knowledge which was necessary to qualify an ecclesiastic in that very essential part of his function, the performance of choral service. His relation of the combat between H square and b round, though it seems to have been but a drawn battle, can no more be read with a serious countenance than his learned argument tending to prove the resemblance of Leah and Rachel to the tone and semitone, and that the sons of Jacob were produced in much the same manner as the musical consonances.

Of the treatise *De octo Tonis* nothing requires to be said save that it contains a very imperfect state of that fanciful doctrine touching the Music of the Spheres, which very few of the many authors that mention it believe a word about. And as to the offering of the monk of Sherborne, notwithstanding his having received it of St. Mary Magdalen, it appears to have been a present hardly worth his acceptance.

The Treatise *De Origine et Effectu Musicæ* is remarkable for a certain simplicity of style and sentiment, corresponding exactly with the ignorance of the age in which it may be supposed to have been written. Indeed it would be difficult to produce stronger evidence of monkish ignorance, at least in history, than is contained in this tract, where the author, confounding profane with sacred history, re-

lates that Thubal kept a smith's shop, and that Pythagoras adjusted the consonances by the sound of his hammers. The two pillars which he speaks of are mentioned by various authors, and Josephus in particular, who says that one of them was remaining in his time; but no one except this author has ventured to assert that the precepts of music were engraven on either of them. His want of accuracy in the chronology of his history would incline an attentive reader to think that Cyrus, king of the Assyrians, lived within a few years after the deluge; and as to king Enchiridias, he has neither told us when he reigned, nor whether his kingdom was on earth or in the moon. Notwithstanding all these evidences of gross ignorance, he seems entitled to credit when he relates facts of a more recent date, to the knowledge of which he may be supposed to have arrived by authentic tradition; and among these may be reckoned that contained in the verses at the conclusion of the third chapter of his treatise, which give to England the honour of having produced Johannes De Muris, the greatest musician of his time.

But besides this relation, which gives credit to the testimony of bishop Tanner and other writers, who assert also that De Muris was a native of England, this tract furnishes the means of ascertaining, to a tolerable degree of certainty, the time when every line in the manuscript of Waltham Holy Cross was written; at least it has fixed a certain year, before which the manuscript cannot be supposed to have existed; nay, it goes farther, and demonstrates that this, namely, the treatise *De Origine et Effectu Musicæ*, was composed after the year 1461. The proof of this assertion is as follows: towards the end of the first chapter, and in several other places, the author cites a tract entitled *De quatuor Principalium*, which by the way is frequently referred to by Morley in the annotations on his Introduction. This treatise, which is now in the Bodleian library, is ascribed to an old author named Thomas de Tewksbury, a Franciscan friar of Bristol, who lived about the year 1388. But bishop Tanner has shewn this to be an error, and that the tract, the proper title whereof is *Quatuor Principalia Artis Musicæ*, was written by Johannes Hamboys, doctor of music, in the year 1451. But to return to the treatise *De Origine et Effectu Musicæ*.

In the third chapter, in which the author speaks of the supposed inventor of music, and of some who have improved it, he mentions Guido the monk as the composer of the *Gamma*, and also Guido de Sancto Mauro, who, as he relates, lived after him: besides these two, who will presently be shewn to be one and the same person, he speaks of Guido Major and Guido Minor. That Guido de Sancto Mauro is no other than Guido Aretinus is demonstrably certain; for the subsequent tract, entitled *Metrologus*, contains several whole chapters, which, though said to be '*secundum Guidonem de Sancto Mauro*,' are taken verbatim from the *Micrologus* of Guido Aretinus; and as to Guido Major and Guido Minor, they are clearly Guido Aretinus, and that other Guido, surnamed Augensis, mentioned by Wylde in the first chapter of the second part of his treatise, to have corrected the cantus of the Cistercian order.

But here it is to be remarked, that Wylde's tract contains two designations of Guido Minor, which are utterly inconsistent with each other, there being no ecclesiastic or other person surnamed Augensis, mentioned in history as the corrector of the Cistercian cantus. On the contrary, we are told that St. Bernard the abbot, who was of the monastery of Clairvaux, and lived about the year 1120, was the person that corrected the Cistercian cantus, or rather antiphonary. On the other hand, Berno, abbot of Rickhow, or Rickenow, in the diocese of Constance, and therefore surnamed Augensis, Augia being the Latin name of the place, wrote several treatises on music, of which some account has herein before been given. And he does not make the least pretence to the having improved the Cistercian antiphonary; so that upon the whole it seems as if Wylde had confounded the two names together, and that by Guido Minor we are to understand St. Bernard the abbot.

The *Speculum Psallentium* contains a few general directions for singing the divine offices; the verses of St. Augustine are to the same purpose, and those of St. Bernard a satire on disorderly singers, who are described in such barbarous Latin as it seems impossible to translate.

Of the *Metrologus* little need be said, it being scarce any thing more than a compendium of the *Micrologus* of Guido Aretinus, with some remarks of the author's own, tending very little to the illustration of the subject. That it should be entitled *Metrologus* is not to be accounted for, seeing there is scarce anything relating to the *Cantus Mensurabilis* to be found in it.

The tract entitled *Distinctio inter Colores musicales et Armorum Heroum*, is a work of some curiosity, not so much on account of its merit, for it has not the least pretence to any, but its absurdity; for the author attempts to establish an analogy between music, the principles whereof are interwoven in the very constitution of nature, and those of heraldry, which are arbitrary, and can scarce be said to have any foundation at all: this may in some measure be accounted for from the high estimation in which the science of Coat Armour, as it is called, was formerly held. Most of the authors who have formerly written on it, as namely, dame Juliana Barnes, Sir John Ferne, Leigh, Boswell, and others, term it a divine and heavenly knowledge; but the wiser moderns regard it as a study of very little importance to the welfare of mankind in general. Morley had seen this notable work, and has given his sentiments of heraldical, or rather, as he terms it, alchemical music, in the annotations on the first part of his Introduction.

The declaration of the triangle and the shield by John Torkesey has some merit, for though the shield be a whimsical device, the triangle, which shews how the perfect or triple and imperfect or duple proportions are generated, is an ingenious diagram. Zarlino and many other authors have adopted it; and Morley has improved on it in a scheme intitled a table containing all the usual proportions.

The treatise entitled *Regule Magistri Johannes De Muris*, can hardly be perused without a wish that

the author had given some intimation touching the work from which these rules are extracted; not that there is any reason to doubt their authenticity, but that the world might be in possession of some better evidence than tradition, that he was the author of that improvement in music which is so generally ascribed to him.

The treatise of the accords by Lionel Power, as it contains the rudiments of extempore descant, must be deemed a great curiosity, were it only because it is an undeniable evidence of the existence of such a practice: but it is valuable in another respect; it is a kind of musical syntax, and contains the laws of harmonical combination adapted to the state of music, perhaps as far back as the time of Henry IV. There are no other memorials of this author than the catalogue of musicians at the end of Morley's Introduction, in which only his christian and surname occur.

As to Chilston, he seems to have been the author of three distinct treatises; the first on descant, the second on Faburden, and the third on the proportions; and each of these subjects requires to be distinctly considered.

The precepts of descant, although the practice is now become antiquated, so far as they are consistent with the laws of harmony, and the rules of an orderly modulation, are of general use; since they are applicable, as well to the most studied compositions, as to extempore practice; and accordingly we see them exemplified in many instances, particularly in the works of Tallis, Bird, Bull, and others, and in a book published in 1591, entitled 'Divers and sundrie Wayes of two Parts in one, to the number of fortie, upon one playn-song, by John Farmer.' In these the office of the plain-song is to sustain, while that part which is termed the Descantus breaks; or, as some of the authors above-cited term it, flowers the melody according to the will and pleasure of the composer.

But as to extempore descant, it seems difficult to assign any reason for the prevalence of it, other than that it was an exercise for the invention of young musical students, or that it furnished those a little above the rank of common people with the means of forming a kind of music somewhat more pleasing than the dry and inartificial melodies of those days; for as to its general contexture, it was unquestionably very coarse.

Morley, who in his second dialogue professes to teach his scholar the art of descant, but in a way calculated for written practice, has, in the annotations on that part of his work, given his sense at large on this practice of extempore descant in the following words:—

'As for singing upon a plain-song, it hath byn in times past in England (as every man knoweth) and is at this day in other places, the greatest part of the usual musicke which in any churches is sung, which indeed causeth me to marvel how men acquainted with musicke can delight to hear suche confusion, as of force must bee amongst so many singing extempore. But some have stood in an

'opinion, which to me seemeth not very probable, that is that men accustomed to descanting will sing together upon a plain-song without singing eyther false chords, or forbidden descant one to another, which till I see I will ever think impossible. For though they should all be mooste excellent men, and every one of their lessons by itself never so well framed for the ground, yet is it impossible for them to be true one to another, except one man shoulde cause all the reste to sing the same which he sung before them: and so indeed (if he have studied the canon beforehand) they shall agree without errors, else shall they never do it.*

These are the sentiments of Morley with respect to the practice of descant or extempore singing on a given plain-song, a practice which seems to have obtained, not so much on the score of its intrinsic worth, as because it was an evidence of such a degree of readiness in singing as few persons ever arrive at; and that this was the case is evident from the preference which the old writers give to written descant, which they termed Prick-song, in regard that the harmony was written or pricked down; whereas in the other, which obtained the name of Plain-song, it rested in the will of the singer. Besides many other reasons for this preference, one was that the former was used in the holy offices, whereas the latter was almost confined to private meetings and societies, and was considered as an incentive to mirth and pleasantry; and the different use and application of these two kinds of vocal harmony, induced a sort of competition between the favourers of the one and the other. Such persons as were religiously disposed contended for the honour of prick-song, that it was pleasing to God; and as far as this reason can be supposed to weigh, it must be admitted that they had the best of the argument.

Of the different sentiments that formerly prevailed, touching the comparative excellence of Prick-song and Plain-song, somewhat may be gathered from an interlude published about the latter end of the reign of king Henry VII. by John Rastall, brother-in-law of Sir Thomas More, with the following title, 'A new interlude, and a mery of the nature of the iiiii elements, declarynge many proper poynts of phylofophy natural, and of dyvers fraunge landys, and of dyvers fraunge effects and causes, whiche interlude, yf the hole matter be playde, wyl conteyne the space of an houre and a halfe, &c.† The speakers in this

* The difference between written and extempore descant, as above stated, is obvious; and unless it be admitted it will be very difficult to conceive it possible that children of tender years could arrive at any degree of proficiency in the practice of descant, which yet they are supposed to be capable of. In a book containing an account of the household establishment of Edward IV., entitled *Liber niger Domus Regis*, it is required of the master of the grammar-school to instruct the king's Henchmen, and the children of the chapel, 'after they came their Descante, and other men and children of the court disposed to learn it, the science of gramere.' Now it can hardly be conceived that a child educated in music, but of such tender age as to be unripe for grammatical instruction, could be acquainted with the practice of *extempore* descant, or that he could know more of music than was necessary to enable him to sing the Descantus or the written part assigned him; and therefore it seems that by the expression, 'after they came their descante,' &c., nothing more is meant than that after they are become capable of singing, perhaps at sight, they shall be taught the rudiments of grammar.

† At the end of the *Dramatis Personæ* is this note:—'Also if ye lyft ye may brynge in a dygyfyngc.' Percy's *Essay on ancient Songs and Ballads*. Rel. of Ancient English Poetry, vol. I. p. 132, in not

interlude are the Messengere [or prologue] Nature naturate, Humanyte, Studious Desire, Sensuall Appetyte, the Taverner, Experyence, Ygnoraunce, between whom and Humanyte is the following dialogue :—

- Humanyte. Prick-long may not be dispyfyd,
For therewith God is well pleyfyd,
Honoured, prayfd, and feryfyd
In the church oft tymes among.
- Ygnorance. Is God well pleyfyd trowest thou thereby?
Nay, nay, for there is no reason why,
For is it not as good to fay playnly
Gyf me a spade,
As gyf me a spa ve, va, ve, va, ve, vade?
But yf thou wilt have a song that is gode,
I have one of Robinhode,
The best that ever was made.
- Human. Then a felchyp, let us here it.
- Ygn. But there is a borden thou must bere,
Or ellys it wyll not be.
- Human. Then begyn and care not for,
Downe, downe, downe, &c.

By means of the several passages above-cited some idea may be formed of the nature of extempore des-



‘And though this be prickt a third above the ‘plain-song, yet was it alwaies sung under the plain-song.’*

The treatise of Musical Proportions is a very learned work; and as it is a summary of those principles on which the treatise De Musica of Boetius is founded, and affords the means of judging of the nature of the ancient arithmetic, so different from that of modern times, it merits to be read with great attention.

The two manuscripts from which the foregoing extracts are severally made, appear to have been held in great estimation. The latter of them was formerly the property of Tallis, as appears by the name Thomas Tallis, written in the last leaf thereof. And it evidently appears that Morley had perused

* Brossard says of Faburden that it is the burden or ground-bass of a song, not framed according to the rules of harmony, but preserving the same order of motion as the upper part, as is often practised in singing the Psalms and other parts of the divine offices. The Italians, he says, give this name to a certain harmony produced by the accompaniments of several sixths following one another, which make fourths between the two higher parts, because the intermediate part is obliged to make tierces with the base, as in this example :—



He adds, that some are of opinion that the *mi* in the middle part marked *A* should be preceded by a *B* *mol*, and made *FA*, to avoid the false relation of a tritone with the *FA* in the base, marked *B*; though others pretend that on many occasions this dissonance has its beauty, and examples of both these methods occur in eminent authors. Diction. de Musique, in Voce *FALSO BORDONE*.

cant, and the degree of estimation in which it stood about the middle of the sixteenth century; a kind of vocal harmony of great antiquity, but of which it must now be said that there are not the smallest remains now left amongst us.

As to Faburden, a species of descant mentioned by Chilston, and which seems not to fall within any of the above rules, Morley thus explains it.

‘It is also to be understood, that when men did ‘sing upon their plain-songs, he who sung the ground ‘would sing it a sixth under the true pitche, and ‘sometimes would breake some notes in division; ‘which they did for the more formall comming to ‘their closes; but every close (by the close in this ‘place you must understand the note which served ‘for the last syllable of every verse in their hymnes) ‘he must sing in that tune as it standeth, or then in ‘the eighth below. And this kind of singing was ‘called in Italy *Falso Bordone*, and in England ‘Faburden, whereof here is an example; first the ‘plain-song and then the Faburden :—

them both very attentively, previous to the writing of his Introduction to Music. That passage thereof wherein he cites Robert de Hauilo, and those other wherein he mentions Philippus de Vitriaco and the singers of Navernia, plainly shew that he had perused the Cotton manuscript. As to the other, as it was in the hands of his friend Tallis, very little proof is necessary to induce a belief that he made a very liberal use of that also; but the express mention of the treatise De Quatuor Principalium, his ridicule of that heraldical musician who undertakes to shew the analogy between music and coat armour, and, above all his explanation of the terms Geometrical, Harmonical, and Arithmetical proportion, in his annotations on the first part of his Introduction, are proofs irrefragable that he had availed himself of Wylde’s labours, and made a due use of the manuscript of Waltham Holy Cross.

The Cotton manuscript, and that of Waltham Holy Cross, which seem to contain all of music that can be supposed to have been known at the time of writing them, make but a very inconsiderable part of those which appear to have been written in that period which occurred between the time of Guido and the invention of printing; and innumerable are those who, in the printed accounts of ancient English writers in particular, are said to have written on various branches of the science. That the greater number of these authors were monks is not to be wondered at, for not only their profession obliged them to the practice of music, but their sequestered manner of life gave them leisure and opportunities of studying it to great advantage.

To entertain an adequate idea of the monastic life

in this country, during the three centuries preceding the Reformation, it is in some measure necessary that we should guard against the reports that were raised to justify that event; as that religious houses were the retreats of sloth and ignorance, and that very little benefit accrued to mankind from the joint efforts of the whole body of the regular clergy of this kingdom.

This must appear very improbable to such as are acquainted with the state of learning at the time now spoken of, since it is not only certain that all that was to be known in those days of inevitable ignorance was known to them; but that it was part of the regimen of every religious house to assign to the brethren employments suitable to their several abilities; and that while some were employed in offices respecting the oeconomy of the house, and the improvements and expenditure of its revenues, some in manual occupations, such as binding books, and making garments, others were treading the mazes of logic, multiplying the glosses on the civil, and enlarging the pale of the canon law, or refining on the scholastic subtilties of Peter Lombard, Aquinas, and Scotus. Another class of those engaged in literary pursuits were such whose abilities qualified them to become authors in form, and these were taken up in the composing of tracts on various subjects, as their several inclinations led them. Nor must those be forgotten who laboured in the copying of music, in the transcribing and illuminating of Missals, Antiphonaries, Graduals, and other collections of offices used in the church-service,* the beauty and neatness

whereof are known only to those who have made it their business to collect or peruse them. Some of these in the public libraries and private collections are, for fine drawing and colouring, as well as of a great variety of scripture histories, as of the numberless illuminations with which they abound, the objects of admiration, even among artists themselves; and as to the character in which they are written, there are no productions of modern times that can stand in competition with it, in respect either of beauty, neatness, or stability: others were employed in writing the ledger books of their respective houses, and in composing histories and chronicles of the times. Many undertook the transcribing of the fathers; and others, even in those times of supposed ignorance and indolence, the classics. John Wheathamstead, abbot of St. Albans, caused above eighty books to be transcribed during his abbacy, and fifty-eight were copied by the care of one abbot of Glastonbury. Indeed if we may believe some writers, others were less laudably employed in the forging of deeds and ancient charters, in order to fortify the right of their confreres to such manors, lands, &c. as they happened to hold under a litigious or disputable title; these men were both antiquaries and lawyers; they were scribes, or, to go a step higher, perhaps conveyancers, they made wills and charters of land, and gave legal counsel to the neighbouring farmers and others.

The benefits that accrued to learning from the

* and intricate a matter, that many times there was more business to find 'out what should be read, than to read it when it was found out.'

Bishop Sparrow has attempted to explain this strange word, and supposes it to be derived from the Greek word Πινὰξ, Pinax, a table or order how things should be digested or performed; but he adds the Latin word is Pica, which he imagines came from the ignorance of friars, who have thrust many barbarous words into liturgies. Farther he supposes it might come from Littera Picata, a great black letter at the beginning of some new order in the prayer; for that among printers the term Pica letter is used. See his answer to liturgical demands in his *Rationale of the Common Prayer*. And to the same purpose Hamon L'Estrange in his *Alliance of Divine Offices*, page 24, thus speaks:—

'Pica, or in English the Pye, I observe used by three several sorts of men, 'first by the quondam Popish clergy here in England before the Reformation, who called their ordinal or directory Ad usum Sarum (devised for the more speedy finding out the order of reading their several services appointed for several occasions at several times) the Pye. 'Secondly, by printers, who call the letters wherewith they print books, and treatises in party colours, the Pica letters. Thirdly, by officers of 'civil courts, who call their callenders or alphabetical catalogues, directing to the names and things contained in the rolls and records of 'their courts, the Pyes. Whence it gained this denomination is difficult 'to determine, whether from the bird Pica, variegated with diverse 'colours, or whether from the word Πινὰξ, contracted into Πι, which 'denoteth a table, the Pye in the directory being nothing else but a table 'of rules, directing to the proper service for every day, I cannot say: 'from one of these probably derived it was.'

These authorities seem to justify Johnson in his opinion that the words Ordinal and Pye are synonymous, to which it may be added that bishop Gibson explains the latter by saying that it means a table for finding out the service belonging to each day. Codex 299, in not.

Such immense numbers of these service-books, and indeed other manuscripts on vellum and parchment, were seized to the king's use, and dispersed throughout the realm upon the dissolution of monasteries, that they became as common as waste paper; and it is notorious that the common and ordinary binding of old printed books was originally the leaves of such manuscripts as are now spoken of: such as remain yet entire are still sought after as matters of great curiosity; but none are more ready to purchase an ancient vellum manuscript than the gold-beaters, who make use of them in the beating of gold into leaves, in the doing whereof a leaf of gold is placed between two of vellum. These artificers may be said to entertain a reverence for antiquity, for they prefer the more to the less ancient manuscripts, and for so doing give this notable reason, that the former are less greasy than the latter.

The use of the several books above enumerated, and many others of the like kind, as namely, Antiphonaries, Missals, Gradals, Processionals, Manuals, Legends, Pies, Portuasses, Primers Latin and English, Couchers, Journals, Ordinals and other books, hereto before used for service of the church, other than such as shall be set forth by the king's majesty, is abolished by a statute of 3 and 4 Edw: VI. chap 10.

* The number of books necessary for the performance of divine service in the several churches was so great, that the writing of them must have afforded employment for many thousand persons. By the provincial constitutions of Archbishop Winchelsey, made at Merton, A.D. 1305. Const. 4. it is required that in every church throughout the province of Canterbury there should be found a Legend, an Antiphonary, a Grail or Gradual, a Psalter, a Troper, an Ordinal, a Missal and a Manual. And as there are but three dioceses in this kingdom, which are not within the province of Canterbury, this law was obligatory upon almost the whole of the realm; as to the religious houses they can hardly be supposed to have stood in need of any injunction of this sort. Besides that the writing of service-books was a constant, it appears also to have been a lucrative employment. Sir Henry Spelman says that two Antiphonaries cost the little monastery of Crabbuse in Norfolk, twenty-six marks, in the year 1424; which, he adds, was equal to fifty-two pounds, according to the value of money in his age. Gloss. Voc. ΑΝΤΙΦΩΝΑΡΙΟΝ. And it is elsewhere said that the common price of a mass-book was five marks, the vicar's yearly revenue. Johnson's *Ecclesiastical Laws*. Winchel. in not.

To understand this constitution it may be necessary to explain the terms made use of in it: a Legend or Lectionary contained all the lessons, whether out of the scriptures or other books that were directed to be read in the course of the year. The Antiphonary contained all the invitatories, responsories, collects, and whatever else was said or sung in the choir, except the lessons. In the Grail or Gradual was contained all that was sung by the choir at high-mass, as namely, the tracts, sequences, hallelujahs, the creed, offertory, and Trisagium, as also the office for sprinkling the holy water. Johnson, *ibid*. Among the furniture given to the chapel of Trinity-college, Oxford, by the founder, mention is made of 'four Grayles of parchment ligned with gold.' Warton's *Observations* on Spencer, Vol. II. p. 244. The Troper contained the observations, which were devotions used after the Epistle. Johnson, *ibid*. There is now extant in the Bodleian library a very curious manuscript of this kind, with musical notes, which the catalogue, page 135, No. 2558, calls a Troperion; an extract from it is given in the Appendix to this work No. 44, and referred to in chap. 40, book V. The Ordinal contained directions for the performance of the divine offices, and is conjectured to be the same with the Pye, which the preface to queen Elizabeth's liturgy mentions as being very intricate and difficult to turn. The Missal was the whole mass-book used by the priest, and the Manual was the ritual, containing the rites, directions to the priests, and prayers used in the administration of baptism and other sacraments; the blessing of holy-water, and, as Lyndwode adds, the whole service used in processions. Johnson, *ibid*. Vide Lyndw. Prov lib. III. tit. 27, edit. 1679.

Johnson conjectures the Ordinal to be the same with the Pye mentioned in queen Elizabeth's liturgy, the words are: 'Moreover, the number and hardness of the rules called the Pye, and the manifold chauncings of the service, was the cause that to turne the booke only, was so hard

labours of these men must have been very great, since it is well known that before the invention of printing the only method of multiplying copies of books was by writing; and for the purpose of diffusing knowledge in the several faculties, the writers of manuscripts, though very slowly, did the business of printers; and the value that was set on their manual operations is only to be judged of by that

extreme care and caution which men of learning were wont to exert over their collections of books. In those days the loan of a book was attended with the same ceremonies as a mortgage; and a scholar would hardly be prevailed upon to oblige his friend with the perusal of a book without a formal obligation to return it at an appointed day.*

BOOK VII. CHAP. LVIII.

THE censures of monkish ignorance and dissoluteness, so frequent in the works of modern writers, are become almost proverbial expressions; and were we to credit them, we should believe that neither learning of any kind, nor regularity, nor economy had the least countenance among them. Objections of this kind are generally made by men less knowing than those they thus condemn; such as speak of the study of musty records, and researches into antiquity, with contempt; men of no curiosity, and who are willing to take all things upon trust, and who palliate their ignorance by affecting to despise that of which they are ignorant. That the world is under great obligations to the regular clergy is evinced by the numerous volumes yet extant, the works of monks; and that the strictest order and regularity was observed among them, will appear from the following general detail of the monastic institution, and of the rule and order observed in the greater abbeys and religious houses in this kingdom.

The officers in abbeys were either supreme, as the abbot; or obediencial, as all others under him. The abbot had lodgings by himself, with all offices thereunto belonging, the rest took precedency according to the statutes of their convents.

Immediately next under the abbot was the prior; though by the way, in some convents, which had no abbots, the prior was principal, as the president in some Oxford foundations; and being installed priors, some voted as barons in parliament, as the priors of Canterbury and Coventry; but where the abbot was supreme, the person termed prior was his subordinate, and in his absence, in mitred abbeys, by courtesy was saluted as the lord prior; there was also a sub-prior, who assisted the prior when he was resident, and acted in his stead when absent.

The greater officers under these were generally six in number, as in the monastery of Croyland; and this order prevailed in most of the larger foundations; they are thus enumerated:—

1. Magister operis, or master of the fabric; who probably looked after the buildings, and took care to keep them in good repair.

2. Eleemosynarius, or the almoner; who had the oversight of the alms of the house, which were every day distributed at the gate to the poor, and who divided the alms upon the founder's day, and at other obits and anniversaries, and in some places provided for the maintenance and education of the choristers.

3. Pitantiarius; who had the care of the pieties,

which were allowances upon particular occasions, over and above the common provisions.

4. Sacrista, or the sexton; who took care of the vessels, books, and vestments belonging to the church; looked after and accounted for the oblations at the great altar, and other altars and images in the church, and such legacies as were given either to the fabric or utensils; he likewise provided bread and wine for the sacrament, and took care of burying the dead.

5. Camerarius, or the chamberlain; who had the chief care of the dormitory, and provided beds and bedding for the monks, razors and towels for shaving them, and part of, if not all their clothing.

6. Cellerarius, or the cellarer; who was to procure provisions for the monks, and all strangers resorting to the convent; viz., all sorts of flesh, fish, fowl, wine, bread, corn, malt for their ale and beer, oatmeal, salt, &c., as likewise wood for firing, and all utensils for the kitchen. Fuller says that these officers affected secular gallantry, and wore swords like lay gentlemen.

Besides these were also—

Thesaurarius, or the burser; who received all the common rents and revenues of the monastery, and paid all the common expences.

Precentor, or the chanter; who had the chief care of the choir-service, and not only presided over the singing men, organist, and choristers, but provided books for them, paid them their salaries, and repaired the organ: he had also the custody of the seal, and kept the liber diurnalis, or chapter-book, and provided parchment and ink for the writers, and colours for the limners of books for the library.

Hostiliarius, or hospitalarius; whose business it was to see strangers well entertained, and to provide firing, napkins, towels, and such like necessaries for them.

Infirmarius; who had the care of the infirmary, and of the sick monks, who were carried thither, and was to provide them physic, and all necessaries whilst

* In Selden's Dissertation on Fleta is given a copy of an instrument of this kind, made anno 1277, acknowledging the receipt of a well-known law-book, entitled Breton, in the words following:—

'Universis presentes litteras inspecturis R. de Scardeburgh Archidiaconus salutem in Domino sempiternam. Noveritis me recipisse et habuisse ex causa commodati librum quem dominus Henricus de Breton composuit, à venerabili patre Domino R. Dei gratia Bathoniensi Episcopo per manum Magistri, Thomæ Beke, Archidiaconi Dorset, quem eidem restituere teneor in festo sancti Joh' Baptiste, an. Dom. mcccxxxviii. In cuius rei testimonium presentibus sigillum meum appensum, Datæ Dover die Veneris post purific' Virginis Gloriosæ, anno mcccxxxvii.'

The following less ancient instances of the same kind, occur in the catalogue of the Harleian manuscripts, No. 378. Sir Simonds D'Ewes' bond of £100 for borrowing Sir Thomas Cotton's book of Saxon Charters (viz. Augustus II.) which was not executed since Sir Thomas refused to lend it. Eight other instances are in the same manuscript.

living, and to wash and prepare their bodies for burial when dead.

Refectionarius; who looked after the hall, providing table-cloths, napkins, towels, dishes, plates, spoons, and all other necessities for it, and even servants to attend there; he had likewise the keeping of the cups, salts, ewers, and all the silver utensils whatsoever belonging to the house, except the church plate.

There was likewise Coquinarius, Gardinarius, and Portarius, 'et in cœnobiis, quæ jus archidiaconale in prædiis et ecclesiis suis obtinuerunt, erat monachus 'qui archidiaconi titulo et munere insignitus est.'

The offices belonging to an abbey were generally these:—

The hall, or refectory, and, adjoining thereto, the locutorium, or parlour, where leave was given for the monks to discourse, who were enjoined silence elsewhere.

Oriolium, or the oriel, was the next room, the use whereof was for monks who were rather distempered than diseased, to dine therein.

Dormitorium, the dormitory, where they all slept together.

Lavatorium, generally called the landry, where the clothes of the monks were washed, and where also at a conduit they washed their hands.

Scriptorium, a room where the Chartularius was busied in writing, especially in the transcribing of these books—1. Ordinals, containing the rubric of their missal, and directory of their priests in service. 2. Consuetudinals, presenting the ancient customs of their convents. 3. Troparies. 4. Collectaries, wherein the ecclesiastical collects were fairly written. This was the ordinary business of the Chartularius and his assistant monks, but they also employed themselves in transcribing the fathers and classics, and in recording historical events.

Adjoining to the Scriptorium was the Library, which in most abbeys was well furnished with a variety of choice manuscripts.

The Kitchen, with larder and pantry adjoining.

The abbey church consisted of—1. Cloisters, consecrated ground, as appears by the solemn sepulchres therein. 2. Navis ecclesiæ, or the body of the church. 3. Gradatorium, the ascent by steps out of the former into the choir. 4. Presbyterium, or the choir; on the right side whereof was the stall of the abbot, with his moiety of monks, and on the left that of the prior, with his: and these alternately chanted the responsals in the service. 5. Vestiarium, or the vestry, where their copes, surplices, and other habiliments were deposited. 6. Vaulta, a vault, being an arched room over part of the church, which in some abbeys, as St. Albans, was used to enlarge their dormitory, where the monks had twelve beds for their repose.

Concameratio, being an arched room betwixt the east end of the church and the high altar, so that in procession they might surround the same, founding their practice on David's expression—'and so will I compass thine altar, O Lord.'*

* The want of this in the new cathedral of St. Paul is not to be imputed to Sir Christopher Wren as an omission, but to the disuse of processions in our reformed church, which has rendered such a provision unnecessary.

To the church belonged also, Cerarium, a repository for wax candles. Campanile, the steeple. Polyandrium, the church-yard. The remaining rooms of an abbey stood at a distance from the main structure, and were as follow:—

Eleemosynaria, the almonry, vulgarly the ambry, a building near or within the abbey, wherein poor and impotent persons were relieved and maintained by the charity of the house.

Sanctuarium, or the sanctuary, wherein debtors taking refuge from their creditors, malefactors from the judge, lived in all security.

At a distance stood the stables, which were under the care and management of the Stallarius, or master of the horse, and the Provendarius, who, as his name imports, laid in provender for the horses; these were of four kinds, namely,—1. Manni, geldings for the saddle of the larger size. 2. Runcini, runts, small nags. 3. Summarii, sumpter-horses. 4. Averii, cart or plough horses.†

Besides the buildings above-mentioned, there was a prison for incorrigible monks. The ordinary punishment for small offences was carrying the lanthorn, but contumacious monks were by the abbot committed to prison.

Other buildings there were, such as Vaccisterium, the cow-house, Porcarium, the swine-stye, &c.

Granges were farms at a distance, kept and stocked by the abbey, and so called à grana gerendo, the overseer whereof was commonly called the Prior of the grange: these were sometimes many miles from the monastery. In female foundations of nunneries there was a correspondency of all the same essential officers and offices.

Besides there were a number of inferior officers in abbeys, whose employments can only be guessed at by the barbarous appellations used to distinguish them; such were—1. Coltonarius [cutler]. 2. Cupparius. 3. Potagiarius. 4. Scutellaris Aulæ. 5. Salsarius. 6. Portarius. 7. Carectarius Cellerarii. 8. Pelliparius [parchment provider]. 9. Brasinarius [malster].‡

If in the admirable construction of that edifice proof of his skill and sagacity were wanting, the following recent one in another public work of his might be adduced, though known to few:—

About seven years ago, when the houses on London-bridge were taken down in order to make a footway on each side thereof, it was found that the tower of St. Magnus church, through which was an entrance into the church from the west, projected so far westward as to reduce passengers on the east side of the bridge to the necessity of going round it. Upon this it became a subject of consultation, whether it were advisable or not to cut through the tower an arch which should continue the footway from the bridge up Fish-street-hill, and prevent the trouble and danger of going about. The thought was bold, for the tower was heavy, and besides contained a peal of large bells; however it was at length resolved on: upon pulling down the houses, the south side of the tower appeared to be a plain superficies of the roughest materials that masons use, and upon this the city surveyor had drawn such an arch as he meant to cut through from south to north; but as soon as the workmen began to execute his design, by breaking through the exterior surface, they, to the joy and admiration of every one, found a passage and an arch ready formed to their hands by the original designer of the edifice, who, with a sagacity and penetration peculiar to himself, had foreseen the probability of taking down the houses on the bridge, and the consequent necessity of such a provision for the convenience and safety of passengers as that above-mentioned.

† This was the four-fold division of the horses of William the two-and-twentieth abbot of St. Alban's, who lost an hundred horses in one year.

‡ The offices aforesaid in smaller abbeys were but one room, but in the greater monasteries each was a distinct structure, with all under offices attendant thereupon. Thus the Firmorie in the priory of Canterbury had a refectory, a kitchen, a dortour distributed into several chambers, and a private chapel for the devotions of the sick; their almonry also was ac-

Different orders were bound to the observance of different canonical constitutions; however, the rule of the ancient Benedictines, with some small variations, prevailed through most monasteries, and was in general as follows:—

i. Let monks praise God seven times a-day, that is to say,—

1. At cock-crowing. 2. Mattins, which were performed at the first hour, or six o'clock. 3. The third hour, or nine o'clock. 4. The sixth hour, or twelve o'clock. 5. The ninth hour, or three o'clock. 6. Vespers, the twelfth hour, or six o'clock in the afternoon. 7. Seven o'clock at night, when the complectory was sung.*

The first or early prayers were at two o'clock in the morning, when the monks, who went to bed at eight at night, had slept six hours, which were judged sufficient for nature. It was no fault for the greater haste, to come without shoes, or with unwashed hands, if sprinkled at their entrance with holy water; and there is nothing expressly said to the contrary, but that they might go to bed again; but a flat prohibition after mattins; when to return to bed was accounted a petty apostacy.

ii. Let all at the sign given, leave off their work and repair presently to prayers.†

iii. Let those who are absent in public employment be reputed present in prayer.‡

iv. Let no monk go alone, but always two together.§

v. From Easter to Whitsunday let them dine always at twelve, and sup at six o'clock.||

vi. Let them at other times fast on Wednesdays and Fridays till three o'clock in the afternoon.¶

vii. Let them fast every day in Lent till six o'clock at night.**

viii. Let no monk speak a word in the refectory when they are at their meals.

commodated with all the aforesaid appurtenances, and had many distinct manors consigned only to its maintenance.

To many abbeys there appertained also cells, which in some instances were so remote, that the mother abbey was in England, and the cell beyond the seas. Some of these were richly endowed, as that of Wyndham, in Norfolk, which though but a cell annexed to St. Alban's, yet was able at the dissolution to expend of its own revenues seventy-two pounds per annum. These were colonies, into which the abbey discharged their superfluous members, and whither the rest retired when infections were feared at home.

* These were the stated times of public prayer in religious houses; but besides these, occasional ejaculations by christians, as well of the laity as the clergy, were customary till near the end of the last century. Howel, in one of his letters says, 'I knock thrice at heaven-gate; in the morning, in the evening, and at night; besides prayers at meals, and some other occasional ejaculations; upon the putting on of a clean shirt, washing of my hands, and at lighting of candles; and this he adds 'he was able to do in seven languages.' Familiar Letters, vol. II. sect. vi. letter 32, and this practice is recommended by Cosins, bishop of Durham, in a book of devotions published by him.

† This in England, commonly called the ringing-island, was done with tolling a bell, but in other countries with loud strokes; and the canon was so strict, that it provided 'scriptores literam non integrit;' that writers having begun to frame and flourish a text letter, were not to finish it, but to leave off in the middle.

‡ At the end of prayers there was a particular commemoration made of them that were absent, and they by name recommended to divine protection.

§ That they might mutually have both testem honestatis, and monitorem pietatis, in imitation of Christ's sending his disciples to preach two and two before his face.

¶ The primitive church forbade fasting for those fifty days, that Christians might be cheerful for the memory of Christ's resurrection. 'Immunitate jejuniandi à die Pasche Pentecosten usque gaudemus; and therefore more modern is the custom of fasting on Ascension eve.

¶ So making but one meal a day, but the twelve days in Christmas were excepted in this canon.

** Stamping a character of more abstinence on that time; for though the whole of a monk's life ought to be a Lent, yet this most especially, wherein they were to abate of their wonted sleep and diet, and add to their daily devotion; yet so that they might not lessen their daily fare without leave from the abbot.

ix. Let them listen to the lecturer reading scripture to them whilst they feed themselves.

x. Let the septimarians dine by themselves after the rest.††

xi. Let such who are absent about business observe the same hours of prayer.‡‡.

xii. Let none, being from home about business, and hoping to return at night, presume 'foris mandicare,' to eat abroad.§§

xiii. Let the complectory be solemnly sung about seven o'clock at night.|||

xiv. Let none speak a word after the complectory ended, but hasten to their beds.¶¶

xv. Let the monks sleep in beds singly by themselves, but all if possible in one room.

xvi. Let them sleep in their clothes, girt with their girdles, but not having their knives by their sides for fear of hurting themselves in their sleep.

xvii. Let not the youth lie by themselves, but mingled with their seniors.

xviii. Let not the candle in the dormitory go out all night.***

xix. Let infants incapable of excommunication be corrected with rods.†††

xx. Let offenders in small faults, whereof the abbot is sole judge, be only sequestered from the table.‡‡‡

xxi. Let offenders in greater faults be suspended from table and prayers.§§§

xxii. Let none converse with any excommunicated under the pain of excommunication.|||

xxiii. Let incorrigible offenders be expelled the monastery.

xxiv. Let an expelled brother, being readmitted on promise of amendment, be set last in order.¶¶¶

xxv. Let every monk have 2 coats and 2 cowls, &c.****

xxvi. Let every monk have his table-book, knife, needle, and handkerchief.

xxvii. Let the bed of every monk have a mat, blanket, rug, and pillow.††††

†† These were weekly officers, such as the lecturer, servitors at the table, cook, who could not be present at the public refectory, but like the bible-clerks in the Queen's-college, Cambridge, waited on the fellows at dinner, and had a table by themselves.

‡‡ Be it by sea or land, in ship, house, or field, they were to fall down on their knees and briefly keep time with the convent in their devotions.

§§ This canon was afterwards so dispensed with by the abbot on several occasions, that it was frustrate in effect when monks became common guests at laymen's tables.

|| Complectory, so called, because it ended the duties of the day. This service was concluded with that versicle of the Psalmist, 'Set a watch, O Lord, before my mouth, and keep the door of my lips.'

¶¶ They might express themselves by signs, and in some cases whisper, but so softly, that a third might not overhear. This silence was so obstinately observed by some of them, that they would not speak, though assaulted by thieves, to make a discovery in their own defence.

*** In case any should fall suddenly sick, that this standing candle might be a stock of light to recruit the rest.

††† Such were all accounted under the age of fifteen years, of whom were many in monasteries.

‡‡‡ As coming to dinner after grace said, breaking the earthen ewer wherein they washed their hands; being out of tune in setting the psalm; taking any by the hand; receiving letters from, or talking with a friend, without leave of the abbot, &c. [From the table] such were to eat by themselves, and three hours after the rest, until they had made satisfaction.

§§§ Viz., theft, &c., this in effect amounted to the greater excommunication, and had all the penalties thereof.

||| Yet herein his keeper, deputed by the abbot, was excepted. [Converse] Either to eat or speak with him; he might not so much as bless him or his meat, if carried by him: yet to avoid scandal he might rise up, bow, or bare his head to him, in case the other did first salute him with silent gesture.

¶¶¶ He was to lose his former seniority, and begin at the bottom. Whosoever quitted the convent thrice, or was thrice expelled for misdemeanors, might not any more be received.

**** Not to wear at once, except in winter, but for exchange whilst one was washed. And when new clothes were delivered them their old ones were given to the poor.

†††† The abbot also every Saturday was to visit their beds, to see if they had not shuffled into it some softer matter than was allowed of; or purloined meat or dainties to eat in private.

xxviii. Let the abbot be chosen by the merits of his life and learning.

xxix. Let him never dine alone; but when guests are wanting call some brethren unto his table.*

xxx. Let the cellarer be a discreet man to give all their meat in due season.

xxxi. Let none be excused from the office of cook, but take his turn in his week.†

xxxii. Let the cook each Saturday when he goeth out of his office leave the linen and vessels clean and sound to his successor.‡

xxxiii. Let the porter be a grave person to discharge his trust with discretion.§

From this view of the constitution and discipline of religious houses, it is clear that they had a tendency to promote learning and good manners among their own members; but besides this they were productive of much good to the public, seeing that they were also schools of learning and education, for every convent had one person or more appointed for this purpose; and all the neighbours that desired it, might have their children instructed in grammar and church music without any expence to them. In the nunneries also, young women were taught needle-work, and to read English, and Latin if they desired it; and not only the daughters of the lower class of people, but even those of the nobility and gentry, were educated in these seminaries. Farther, monasteries were in effect great hospitals, many poor people being fed therein every day; they were also houses of entertainment, for almost all travellers: even the nobility and gentry, when upon a journey, took up their abode at one religious house or another, there being at that time but few inns in this country. In these, also, the nobility and gentry provided for their children and impoverished friends, by making the former monks and nuns, and in time priors and prioresses, abbots and abbesses,|| and by procuring for the latter corodies and pensions.¶

* Such as were relieved by his hospitality are by canonical critics sorted into four ranks:—

1. Convivæ, guests living in or near the city where the convent stood.
2. Hospites, strangers, coming from distant parts of the country.
3. Peregrini, pilgrims of another nation, and generally travelling for devotion.
4. Mendici, beggars, who received alms without at the gate.

† The abbot and the cellarer in great convents were excepted, but this was only anciently. This was the rule in poor monasteries, with an exception of the abbot and the cellarer; in the larger were cooks and under cooks, lay persons.

‡ Upon pain to receive twenty-five claps on the hand for every default of this kind; harder was that rule which enjoined that the cook might not taste what he dressed for others. Understand it thus, though he might eat his own pittance or dimensum, yet he must meddle with no more, lest the tasting should tempt him to gluttony and excess.

§ Whose age might make him resident in his place. [Discharge his trust] In listening to no secular news, and if hearing it not to report it again; in carrying the keys every night to the abbot, and letting none in or out without his permission.

|| Mary, the daughter of King Edward I., and also thirteen noblemen's daughters, were at one time nuns at Ambresbury. Angl. Sacr. vol. I. pag. 208. And Ralph, earl of Westmoreland, having twenty children, made three of his daughters nuns. Six sons of Henry, lord of Harley, were monks. Angl. Sacr. vol. I. pag. 205. Bridget, the fourth daughter of Edward IV., was a nun at Dartford, in Kent.

¶ A Corody, à conradendo, from eating together, is an allowance of meat, drink, and clothing, due to the king from an abbey, or other house of religion, for the reasonable sustentance of such of his servants as he should bestow it on. Termes de la Ley. Cowel's Interp. in Voce, et vide Mon. Angl. vol. II. pag. 933. Burn. Reform. vol. I. pag. 223. Collier's Eccl. Hist. vol. II. pag. 165. In Plowden's Commentaries, in the case of Throckmerton versus Tracey, is an allusion, but without a particular reference, to a case which nevertheless seems to have received a legal decision, arising upon this question, viz., Whether under a grant of a corody to a man and his servant, the grantee might bring to sit at mess with the abbot and convent, a person infected with the leprosy or other noisome disease. Vide Finch's NOMOTEXIA, fol. 15. b. Finch

Notwithstanding these and other advantages resulting to the public from monastic foundations, it must be confessed that the mischiefs arising from them were very great, for it appears that they were very injurious to the parochial clergy, with whom indeed they seemed to live in a state of perpetual hostility, by accumulating prebends and benefices, and by procuring the appropriation of churches, which they did in this way, first they obtained the advowson, and then found means to get the appropriation also. Bishop Kennet says that at one time above one half of the parochial churches in England were in the hands or power of cathedral churches and monasteries. Case of Appropriations, pag. 18, 19. And where their endeavours to get the appropriation failed, they frequently got a pension out of it. They were farther injurious to the secular clergy by the many exemptions which they had from episcopal jurisdiction, and the payment of tythes.

The public also were sufferers by religious houses in these respects, they drew off a great number of persons, who otherwise would have been brought up to arms, to labour, or the exercise of the manual arts.** The inhabitants of them busied themselves with secular employments, for they were great farmers, and even brewers and tanners, concerning which latter employment of theirs, Fuller thus humorously expresses himself:—'Though the monks themselves were too fine-nosed to dabble in tan-fats, yet they kept others bred in that trade to follow their work; these convents having bark of their own woods, hides of the cattle of their own breeding and killing, and, which was the main, a large stock of money to buy at the best hand, and to allow such chapmen as they sold to, a long day of payment, easily eat out such who were bred up in that vocation. Whereupon in the one-and-twentieth of king Henry VIII. a statute was made that no priest either regular or secular should on heavy penalties hereafter meddle with such mechanic employments.'

Sanctuaries, of which there were many, as at Westminster, Croyland, St. Buriens, St. John of Beverley, and other places, were an intolerable grievance on the public. Stowe, in his Chronicle, pag. 443. complains of them in these words: 'Unthrifths riot, and run in debt upon the boldness of these places; yea and rich men run thither with poor men's goods, where they build; there they spend, and bid their creditors go whistle them; men's wives run thither with their husband's plate, and say they dare not abide with their husbands for beating them; thieves bring thither their stolen goods, and live thereon; there they devise robberies; nightly they steal out, they rob and reave, and kill, and come in again as though those places gave them not only a safeguard for the harm they have done, but a licence to do more.'

Add to all these, other mischiefs, the inevitable

of Law, 56. A pension was an annual allowance in money from an abbey to one of the king's chaplains for his better maintenance, until provided with a benefice. Cowel, voce CORODY.

** It is said that in the ninth century there were in this kingdom more monks than military men; and to this bad policy some have scrupled not to attribute the success of the Danes in their several invasions.

consequences of those prohibitions and restraints imposed on the clergy, as well secular as regular.*

Undoubtedly these evils co-operating with motives of a political nature, were the causes of that reformation, for which even at this distance of time we have abundant reason to be thankful: it cannot be denied that some of the principal agents in that revolution were actuated by the noblest of all motives, namely, zeal for the honor of God; and whether the objections against it, that it was effected by unjustifiable means, such as corruption, subornation, and the invasion of corporate rights, sanctified by law and usage: whether all or any of these are admissible in a subject of so important a nature as the advancement of learning, and the exercise of true religion, is a question that has already been discussed by those who were best able to decide upon it, and will hardly ever again become a subject of controversy.

CHAP. LIX.

THE accounts herein before given of the gradual improvement of music, and the several extracts from manuscripts, herein before contained, may serve to shew the state of the science in this country in or about the fifteenth century; and it remains now to speak of its application, or, in other words, to take a view of the practice of it amongst us. And first it will appear that as it was become essential to the performance of divine service, it was used in all cathedral and collegiate churches, and that the clergy were very zealous to promote it. Of the introduction of the organ into the choral service by pope Vitalianus, in the year 660, mention has already been made; and for the early use of that instrument in this kingdom we have the testimony of Sir Henry Spelman [in his *Glossary*, voce *Organum*] who, upon the authority of the book of Ramsey, relates that on the death of king Edgar the choir of monks and their organs were turned into lamentations.

Farther, William of Malmesbury relates that St. Dunstan, in the reign of the same king, gave many great bells and organs to the churches of the West;† which latter he so describes, as that they appear to have been very little different from those now in use, viz., ‘*Organa ubi per æreas fistulas musicis mensuris elaboratas dudum conceptas follis vomit*

* And yet it seems that the licentiousness of the regulars was not general throughout this kingdom, even in the most corrupt state of clerical manners, for lord Herbert of Cheshire relates, that upon the visitation of religious houses it was found that some societies behaved so well, that their lives were not only exempt from notorious faults, but their spare time was bestowed in writing books, painting, carving, gravings, and the like exercises: and in the preamble to the statute of 27 Hen. VIII. cap. 28, is this remarkable declaration, ‘In the greater monasteries, thanks be to God, religion is right well observed and kept up.’

† It has elsewhere, viz., pag. 176, of this work, been remarked that Dunstan was well skilled in music. There is a tradition that his harp made music of itself, thus humorously related by Fuller in his *Church History*, pag. 128:—

St. Dunstan's harp fast by the wall
Upon a pin did hang—a;
The harp itself with lye and all,
Untouch'd by hand, did twang—a.

This might have happened, supposing two strings tuned in the unison, and the wind to have blown hard against the instrument, and this accident might suggest the invention of the instrument described by Kircher in the *Musurgia*, tom. II. pag. 352, and lately given to the world as a new discovery, by the name of the harp of Æolus.

‘*anxius auras.*’‡ And it is elsewhere said that they had brass pipes and bellows.§ The same writer mentions that the organ at Malmesbury had the following distich inscribed on brass, declaring who was the donor of it:—

*Organa do sancto præsul Dunstanus Aldelmo
Perdat hic æternum, qui vult hinc tollere, regnum.*||

Fuller, in his *Worthies of Denbighshire*, pag. 33, mentions a famous organ, formerly at Wrexham in that county, a matter of great curiosity, in respect that the instrument was erected, not in a cathedral, but in a parochial church: he speaks also of an improvement of the organ by one Bernard, a Venetian, of whom he asserts, on the authority of Sabellicus, that he was absolutely the best musician in the world.

With respect to abbey and conventual churches, we meet with few express foundations of canons, minor canons, and choristers; and it may therefore well be supposed that the choral duty in each of these was performed by members of their own body, and by children educated by themselves; but in cathedral churches we meet with very ample endowments, as well for vicars, or minor canons, clerks, choristers, and lay singers, as for a dean, and canons or prebendaries. As to the value and extent of these endowments in the metropolitanical churches of Canterbury and York, and the cathedrals of Durham, Winchester, London, Ely, Salisbury, Exeter, Norwich, Lincoln, and many others, we are greatly at a loss, for they, having been re-founded by Henry VIII., the ancient foundations were absorbed in the modern, and it is of the latter only that there are any authentic memorials now remaining; of those that retain their original constitution the following are some of the principal:—

Hereford, the cathedral rebuilt in the time of William the Conqueror, and by the contributions of benefactors endowed so as to maintain a bishop, dean, two archdeacons, a chancellor, treasurer, twenty-eight prebendaries, twelve priest-vicars, four lay clerks, seven choristers, and other officers. In aid of this foundation Richard II. incorporated the vicars-choral, endowing them with lands for their better support; and they exist now as a body distinct in some respects from the dean and chapter.¶

Of the original endowment of the cathedral of St. Paul, little is now to be known. We learn however from Dugdale that considerable grants of land and benefactions in money were made for its support by divers persons at different times, as also for the maintenance of its members, so early as the time of Edward the Confessor. Of the minor canons the following is the history. They were twelve in number, and had anciently their habitation in and about the church-yard; but at length by the bounty of well-disposed persons, they became enabled to meet and dine together in a common hall or refectory, on the north side of the church. In the year 1363 Robert de Keteryngham, rector of St. Gregory's,

‡ Gul. Malmesb. lib. V. de Pontif. inter xv. Script. Galat. pag. 306.

§ Gul. Malmesb. in Vita Aldelmi, pag. 23.

|| Cul. Malmesb. de Pontif. lib. V. pag. 306.

¶ Tanner's *Notitia Monastica*, pag. 171, 179.

with licence of king Edward III. granted to the dean and chapter certain messuages and lands of the yearly value of vi. l. xiii. s. iv. d. to the end that the minor canons should sing divine service daily in the church of St. Paul, for the good estate of the king, and queen Philippa his consort, and all their children during their lives, and also for their souls after their decease. Richard II. by his letters patent in the eighteenth year of his reign, incorporated them by the style of the college of the twelve petty canons of St. Paul's church, and augmented their maintenance by a grant to them of divers lands and rents; and 24 Henry VI. the church of St. Gregory was appropriated to them.*

At Wells also is a college of vicars, founded originally for the maintenance of thirteen chantry priests, who officiated in the cathedral. In 1347 Radulphus de Salopia, bishop of Bath and Wells, erected a college for the vicars of the cathedral church, got them incorporated, and augmented their revenues with certain lands of his own.†

The ancient foundation of Litchfield cathedral appears to have been a bishop, dean, precentor, chancellor, treasurer, four archdeacons, twenty-seven prebendaries, five priest-vicars, seven lay-clerks or singing-men, eight choristers, and other officers and servants.‡

Many collegiate churches had also endowments for the performance of choral service, as that of Southwell, in Nottinghamshire; Beverley in Yorkshire; Arundel in Sussex, now dissolved; Westminster, which by the way has been successively an abbey, a cathedral, and a collegiate church.

Some of the colleges in Oxford have also endowments of this kind, as namely, New college, for ten chaplains, three clerks, and sixteen choristers; Magdalen college, for four chaplains, eight clerks, and sixteen choristers; All-Souls, for chaplains, clerks, and choristers indefinitely; *there also was an institution of some kind or other of chaplains, clerks, choristers at St. John's college, Oxon: but the same was annulled in 1577, the college estate being impaired.* Sir W. Paddy, Physician to James I., refounded the choir. In the college at Ipswich, founded by Cardinal Wolsey, was a provision for a dean, twelve secular canons, and eight choristers; but the college was suppressed, and great part of the endowment alienated upon the disgrace of the founder.

In some free chapels§ also were endowments for choral service, as in that of St. George at Windsor, now indeed a collegiate church, in which are a dean, twelve canons or prebendaries, thirteen vicars or minor canons, four clerks, six choristers, and twenty-six poor alms knights, besides other officers.

'The kynge's college of our Lady by Eton besyde

* The minor canons of the cathedral church of St. Paul have now a college, situate on the south side of the church-yard, and near thereto is a place called Paul's Bakehouse Court, from whence it may be inferred that the members of that church lived together, that the rents arising from their estates situate in the neighbourhood of London were paid in corn, which was made into bread by their own servants, and baked at or near the place above-mentioned.

† Tann. 477. ‡ Ibid. 485.

§ Free chapels were places of religious worship exempt from all jurisdiction of the ordinary, in which respect they differed from chantries, which were ever united to some cathedral, collegiate, or parochial church.

'Wyndesore,' was founded by king Henry VI. anno regni 19, for a provost, ten priests, four clerks, six choristers, twenty-five poor grammar-scholars, with a master to teach them, and twenty-five poor old men; and though some of its endowment was taken away by king Edward IV., yet it still continues (being particularly excepted in the acts of dissolution) in a flourishing estate, with some small alteration in the number of the foundation, which now consists of a provost, seven fellows, two schoolmasters, two conductors, one organist, seven clerks, seventy king's scholars, ten choristers, besides officers and servants belonging to the college.||

The chapel of St. Stephen, near the great hall at Westminster, first built by king Stephen, and afterwards rebuilt by Edward III. in the year 1347, was by the latter ordained to be a collegiate church, and therein were established a dean, twelve canons secular, who had their residence in Canon, vulgarly, Chancel-row, Westminster, thirteen vicars, four clerks, six chorists, two servitors, a verger, and a keeper of the chapel. The same king endowed this chapel or collegiate church with manors, lands, &c. to a very great value: it was surrendered to Edward VI., and the chapel is now the place in which the House of Commons sit.¶¶

As to small endowments for the maintenance of singing men with stipends, they were formerly very many.

At Christ-church, London, was one for five singing men, with a yearly salary of eight pounds each.** There was also another called Poultney college, from the founder Sir John Poultney, annexed to the parish church of St. Lawrence, in Candlewick, now Canon-street, London, with an endowment for a master, or warden, thirteen priests, and four choristers, who had stalls, and performed divine service in the chapel of Jesus, adjoining to the church of St. Lawrence aforesaid.†† At Leadenhall Sir Simon Eyre, who had been some time mayor of London, erected a beautiful and large chapel, and bequeathed to the company of Drapers three thousand marks, upon condition to establish and endow perpetually, a master or warden, five secular priests, six clerks and two choristers, to sing daily service by note in this chapel; and also three schoolmasters and an usher, viz., one master, with an usher, for grammar, another master for writing, and the other for singing. The master's salary to be ten pounds per annum, every other priest's eight pounds, every clerk's five pounds six shillings and eight pence, and every chorister's five marks; but it seems this endowment never took effect.‡‡ In the church of St. Michael Royal, London, which had been new built by the famous Sir Richard Whittington, several times lord mayor of London, was founded by him, and finished by his executors A.D. 1424, a college dedicated to the Holy Ghost and the Virgin Mary, for a master and four fellows, all to be masters of arts; besides clerks, choristers, &c.§§ In the church of St. Mary at Warwick was an endowment by Roger, earl of

¶ Tann. 33.

¶ Newcourt's Repertorium, vol. I. pag. 745. ** Ibid. vol. I. pag. 319.

†† Tann. Notit. pag. 319. ‡‡ Ibid. pag. 325. §§ Ibid.

Warwick, about the year 1123, for a dean and secular canons; this foundation was considerably augmented by the succeeding earls, so that at the time of the dissolution it consisted of a dean, five prebendaries or canons, ten priest-vicars, and six choristers.*

One thing very remarkable in all these foundations, except that of Eton, is that they afforded no provision for an organist.† That excellent musician Dr. Benjamin Rogers, who was very well versed in the history of his own profession, once took notice of this to Anthony Wood: and, considering that the use of organs in divine service is almost coeval with choral singing itself, to account for it is somewhat difficult; it seems however not improbable that in most cathedral, and other foundations for the performance of divine service, the duty of organist was discharged by some one or other of the vicars choral. In the statutes of Canterbury cathedral provision is made for players on sackbuts and cornets, which on solemn occasions might probably be joined to, or used in aid of the organ.‡

The foregoing notices refer solely to that kind of music which was used in the divine offices; but over and above the several musical confraternities formerly subsisting in different parts of this kingdom, a set of men, called stipendiary priests, derived a subsistence from the singing of masses, in chantries endowed for that purpose, for the souls of the founders.§ In the cathedral church of St. Paul were no fewer of these than forty-seven; and in the church of St. Saviour, Southwark, was a chantry, with an endowment for a mass to be sung weekly on every Friday throughout the year, for the soul of the poet Gower, the author of the *Confessio Amantis*. The common price for a mass was four pence, or for two thousand forty marks, which it seems could be only the mode of payment where the service was occasional, since

* Tann. Notit. pag. 570.

† The first instance we have found of a stipendiary organist, is that of one Leonard Fitz Simon, mentioned by Mr. Warton in his *life of Sir Thomas Pope*, as being organist of Trinity College, Oxon: about 1580, at a salary of 20s. a year.

‡ There have been but very few foundations of colleges since the dissolution of monasteries, except those of Henry VIII. In the only one that can now be recollected, that of Dulwich, founded by Alleyn the player, in the reign of James I., provision is made by the statutes that the children there educated should be taught prick-song; and for that purpose, and for performing the service of the chapel, one of the fellows is required to be a skilful organist. Of this worthy man, Mr. Edward Alleyn, the honour of his profession, there is a well-written life, the work of the late Mr. Oldys, in the *Biographia Britannica*. In his time it said that there were no fewer than nineteen playhouses in London. Prynne's *Histrio-mastix*, pag. 492, which are two more than are enumerated in the Preface to Dodsley's collection of old plays; the two omitted in Dodsley's account are said by Prynne to have been, the one in Bishopsgate-street, and the other on Ludgate-hill. The situation of the former of these may possibly be yet ascertained; Fuller, *Worthies in London*, pag. 223, says that Alleyn was born in the parish of Bishopsgate, near Devonshire-house, where now is the sign of the Pie. Now it may be proved, by incontestible evidence, that the Magpie alehouse, situate on the east side of Bishopsgate-street, between Houndsditch and Devonshire-street, with the adjacent houses, are part of the estate with which Alleyn endowed his college, and they are now actually held under leases granted by the college. It is therefore to be supposed, as the Pie was the place of his birth, and continued to be part of his estate to the time of his death; that it was also his dwelling during his life; and if so, where was the playhouse in Bishopsgate-street so likely to be as at the Magpie? Add to this that the very house, now in being, is unquestionably as old as the time of James I., for the fire never reached Bishopsgate; it fronts the street, and the garden behind it was probably the site of the playhouse.

§ This superstitious service was usually performed at some particular altar, but oftener in a small chapel, of which there were many in all the cathedral and collegiate, and in some parish churches in this kingdom. Vide Godolphin's *Repertorium Canonicon*, pag. 329. Fuller's *Church History*, book VI. pag. 350. Weever's *Funeral Monuments*, pag. 733.

the endowment must be supposed to have in a great measure ascertained the stipend, and this was sometimes so considerable, as to occasion as much solicitation for a chantry as for some other ecclesiastical benefices. Chaucer mentions it to the credit of his parson, that he did not flock to St. Paul's to get a chantry. These superstitious foundations survived the fate of the monasteries but a very short time, for they, together with free chapels, were granted to Henry VIII. by the parliament in 1545, and were dissolved by the statute of 1 Edw. VI. chap. 14.

Such was the nature of the monastic institution, and such the state of ecclesiastical music among us, in the ages preceding the Reformation, in which indeed there seems to be nothing peculiar to this country, for the same system of ecclesiastical policy prevailed in general throughout Christendom. In Italy, in Germany, in France, and in England, the government of abbeys and monasteries was by the same officers, and the discipline of religious houses in each country very nearly the same, saving the difference arising from the rule, as it was called, of their respective orders, as of St. Augustine, St. Benedict, and others, which each house professed to follow. This uniformity was but the effect of that authority which, as supreme head of the church, the pope was acknowledged to be invested with, and which was constantly exerted in the making and promulging decretals, constitutions, canons, and bulls, and all that variety of laws, by whatsoever name they are called, which make up the *Corpus Juris Canonici*: add to these the acts of provincial councils, and ecclesiastical synods, the ultimate view whereof seems to have been the establishment of a general uniformity of regimen and discipline in all monastic foundations, as far as was consistent with their several professions.

In aid of these, the ritualists, who are here to be considered as commentators on that body of laws above referred to, have with great precision not only enumerated the several orders in the church,|| but have also prescribed the duty of every person employed in the sacred offices. In consequence whereof we find that the power and authority of an abbot, a prior, a dean, were in every respect the same in all countries where the papal authority was submitted

|| Besides the orders of bishops, priests, and deacons, there are both in the Romish and Greek churches others of an inferior degree, though as to their number there appears to be a great diversity of sentiments. Baronius asserts it to be five, viz., subdeacons, acolythists, exorcists, readers, and ostiarii, or doorkeepers; others make them a much greater number, including therein psalmists, or singers, and the inferior officers employed in and about the church. The duty of each may in general be inferred from their names, except that of the acolythists, which appears to have been originally nothing more than to light the candles of the church, and to attend the ministers with wine for the eucharist. Bishop Hall has exhibited a very lively picture of an acolythist in the exercise of his office in the following lines:—

‘To see a lasie dumbe Acolithite
‘Armed against a devout fflies despiht
‘Which at th’hy altar doth the chalice vail,
‘With a broad file-flappe of a peacocke’s tayle,
‘The whiles the lickerous priest spits every trioe
‘With longing for his morning sacrifice.’

Virgidemiarum, edit. 1602, pag. 100.

And yet, notwithstanding the seeming insignificance of this order, we meet with an endowment, perhaps the only one ever known in this kingdom, at Arundel, in Sussex, for a master and twelve secular canons, three deacons, three subdeacons, two acolytes, seven choristers, two sacristans, and other officers; but it was suppressed at the time of the general dissolution of other religious houses.

to; and the same may be said of the duties of the canons or prebendaries, the precentor, the chorists, and other officers in all cathedral churches. One very remarkable instance of that uniformity in government, discipline, and practice, is that of the *episcopus puerorum*, mentioned in a preceding chapter of this volume, which is there shown to be common to France and England, and probably prevailed throughout the western church; for the traces of it are yet remaining in the reformed churches, as in Holland, and many parts of Germany.

The rule of bestowing on minor canons, or vicars choral, livings within a small distance of a cathedral church, is generally observed by deans and their chapters throughout this kingdom, and by those of other countries.*

CHAP. LX.

HAVING treated thus largely of ecclesiastical, it remains now to pursue the history of secular music, and to give an account of the origin of such of the instruments now in use as have not already been spoken of. What kind of music, and more particularly what instruments were in use among the common people, and served for the amusement of the several classes of the laity before the year 1300, is very difficult to discover: it appears however that so early as the year 679, the bishops and other ecclesiastics were used to be entertained at the places of their ordinary residence with music; and, as it should seem, of the symphoniac kind; and that by women too, for in the Roman council, held on British affairs anno 679, is the following decree:—‘We also ordain and decree that bishops, and all whosoever profess the religious life of the ecclesiastical order, do not use weapons, nor keep musicians of the

* In the tales of Bonaventure des Periers, valet de chambre to Margaret queen of Navarre, is the following pleasant story, which proves at least that this was the usage in France:—

In the church of St. Hilary, at Poitiers, was a singing man with a very fine counter-tenor voice; he had served in the choir a long time, and began to look to his chapter for preferment; to this end he made frequent applications to the canons severally, and received from them the most favourable answers, and promises of the first benefice that should become vacant, but when any fell he had the mortification to see some other person preferred to it. Finding himself thus frequently disappointed, he thought of an expedient to make his good masters the canons ashamed of themselves; he got together a few crowns, and affecting still to court them, invited them to a dinner at his house; they accepted his invitation, but, considering the slender circumstances of the man, sent in provisions of their own for the entertainment, which he received with seeming reluctance, but nevertheless took care to have served up to them: in short, he set before his guests a dish of an uncommon magnitude, containing flesh, some salt and some fresh, fowl, some roast and some boiled, fish, roots, pulse, herbs, and soups of all kinds; in a word, all the provisions that had been sent in. No man being able to eat of this strange mess, each began to hope that his own provision would be set on the table, but the singing man gave them to understand that all was before them; and perceiving their disgust, he thus addressed them:—‘My masters,’ said he, ‘the dish that I proposed for your entertainment displeases ye, are not the ingredients good in their kind that compose it? Are not capons, are not pigeons and wild-fowl, are not trout, carp, and tench, are not soups, the richest that can be made, excellent food? True, you say, they are so separately, but they are naught being mixed and jumbled together. Even so are you my worthy friends; every one of ye separately has for these ten years promised me his favour and patronage, each has flattered me with the hopes of his assistance in procuring for me such a benefice in the church, such a provision for the remainder of my life, as my services in the choir intitle me to. What have ye done for me in all this time? and how much better in your collective capacity are ye than this nauseous mixture of viands which ye now despise?’ Here he ended his reproaches, and ordering the table to be covered with such fare as was fit to entertain them with, they dined, and left him with an assurance that he should soon be provided for, which shortly after he was, to his great satisfaction.

‘Female sex, nor any musical concerts whatsoever;† nor do allow of any buffooneries or plays in their presence. For the discipline of the holy church permits not her faithful priests to use any of these things, but charges them to be employed in divine offices, in making provision for the poor, and for the benefit of the church. Especially let lessons out of the divine oracles be always read for the edification of the churches, that the minds of the hearers may be fed with the divine word, even at the very time of their bodily repast.’

Of instruments in common use, it is indisputable that the triangular harp is by far of the greatest antiquity. Vincentio Galilei ascribes the invention of it to the Irish; but Mr. Selden speaks of a coin of Cunobeline, which he seems to have seen with the figure on the reverse of Apollo with a harp,‡ which at once shews it to have been in use twenty-four years before the birth of Christ, and furnishes some ground to suppose that it was first constructed by those who were confessedly the most expert in the use of it, the ancient British bards.

The above account of the harp leads to an enquiry into the antiquity of another instrument, namely, the Cruth or Crowth, formerly in common use in the principality of Wales. In the *Collectanea of Leland*, vol. v. pag. — amongst some Latin words, for which the author gives the Saxon appellations, *Liticen* is rendered a Cruth.§

The instrument here spoken of is of the fidicinal kind, somewhat resembling a violin, twenty-two inches in length, and an inch and half in thickness. It has six strings, supported by a bridge, and is played on with a bow; the bridge differs from that of a violin in that it is flat, and not convex on the top, a circumstance from which it is to be inferred that the strings are to be struck at the same time, so as to afford a succession of concords. The bridge is not placed at right angles with the sides of the instrument, but in an oblique direction; and, which is farther to be remarked, one of the feet of the bridge goes through one of the sound holes, which are circular, and rests on the inside of the back; the other foot, which is proportionably shorter, resting on the belly before the other sound-hole.

Of the strings, the four first are conducted from the bridge down the finger-board, as those of a violin, but the fifth and sixth, which are about an inch longer than the others, leave the small end of the

† Those of the clergy who entertained a real love for music, were by this decree and a subsequent canon totally restrained from the practice of it for their recreation; the decree forbids social harmony; and by the fifty-eighth of King Edgar’s canons, made anno 960, is an express charge, ‘That no priest be a common rhymor, nor play on any musical instrument by himself or with any other men, but be wise and reverent as become his order.’ Vide Johnson’s *Ecclesiastical Laws*, tit. Canons made in King Edgar’s Reign. As to the decree of the council of 679, above mentioned, it is confined to the singing of females at private meetings; but it seems that before that time girls were used to sing in the churches; for by a canon of a council held in France anno 614, it is expressly forbidden.

‡ Notes on Drayton’s *Polyolbion*, Song VI.

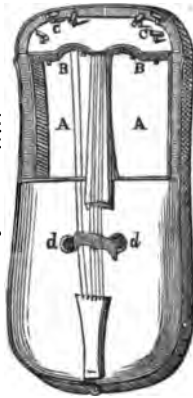
§ Carpentier, in his Supplement to the Glossary of Du Cange, lately published, gives the word *Litucenes*, which he explains, players on wind instruments. This appellative is not formed of *Liticen*, but of *Lituus*, which is a wind instrument, and therefore he is right. Walther, in his *Musical Lexicon*, for *Lituus* gives *Tubam curvam*, and supposes it to mean the Chalameau, which see in Merseus; but more probably it is the cornet, to which the *Lituus* of the Jews in Kircher bears a near resemblance.

neck about an inch to the right. The whole six are wound up either by wooden pegs in the form of the letter T, or by iron pins, which are turned with a wrest like those of a harp or spinnet. The figure, together with the tuning of this singular instrument, is here given :—

Tuning of the Cruth.



- AA The apertures for the hand.
 BB The strings conducted under the end board.
 cc The pegs.
 dd The sound-holes.



Of the tuning it is to be remarked that the sixth and fifth strings are the unison and octave of G, the fourth and third the same of C, and the second and first the same of D; so that the second pair of strings are a fourth, and the third a fifth to the first.

Touching the antiquity of the cruth, it must be confessed there is but little written evidence to carry it farther back than to the time of Leland; nevertheless the opinion of its high antiquity is so strong among the inhabitants of the country where it is used, as to afford a probable ground of conjecture that the cruth might be the prototype of the whole fiducial species of musical instruments.

Another kind of evidence of its antiquity, but which tends also to prove that the cruth was not peculiar to Wales, arises from a discovery lately made, and communicated to the Society of Antiquarians, respecting the abbey church of Melross in Scotland, supposed to have been built about the time of Edward II. It seems that among the outside ornaments of that church, there is the figure of the instrument now under consideration very little different from the representation above given of it.

The word Cruth is pronounced in English *crowth*, and corruptly *crowd*: a player on the cruth was called a *Crowther* or *Crowder*, and so also is a common fiddler to this day; and hence undoubtedly *Crowther* or *Crowder*, a common surname.

Butler, with his usual humour, has characterized a common fiddler, and given him the name of *Crowder*, in the following passage :—

I'th' head of all this warlike rabble,
 Crowdero march'd, expert and able.
 Instead of trumpet and of drum,
 That makes the warrior's stomach come,
 Whose noise whets valour sharp, like beer
 By thunder turn'd to vinegar;
 (For if a trumpet sound, or drum beat,
 Who has not a month's münd to combat?)
 A squeaking engine he apply'd
 Unto his neck, on north east side,

Just where the hangman does dispose,
 To special friends, the knot or noose:
 For 'tis great grace, when statesmen straight
 Dispatch a friend, let others wait.
 His warped ear hung o'er the strings,
 Which was but souse to chitterlings;
 For guts, some write, ere they are sodden,
 Are fit for musick, or for pudden:
 From whence men borrow ev'ry kind
 Of minstrelsy, by string or wind.
 His grisly beard was long and thick,
 With which he strung his fiddle-stick,
 For he to horse-tail scorn'd to owe,
 For what on his own chin did grow.

Hud. part I. canto II. v. 105.

Upon which passage it may be questioned why the poet has chose to make the North-East side the position of the instrument; the answer may be this: that of the four cardinal points the east is the principal, it being from thence that the day first appears; supposing then the face to be turned to the east, and in such a case as this, *cæteris paribus*, any circumstance is a motive for preference, the left is the north side, and in this situation the instrument being applied to the neck, will have a north-east direction.

The instrument above spoken of is now so little used in Wales, that there is at present but one person in the whole principality who can play on it, his name is John Morgan, of Newburgh, in the island of Anglesey; and, as he is now near sixty years of age, there is reason to fear the succession of performers on the cruth is nearly at an end.

The period which has been filled up with the account of the ancient *jongleurs*, violars, and minstrels, and more especially the extracts from Chaucer, and other old poets, furnish the names of sundry other instruments, as namely, the Lute, the Getron or Cittern, the Flute, the Fiddle, and the Cornamusa, or Bagpipe, which it is certain were all known, and in common use before the year 1400.

The book herein before cited by the title of Bartholomæus de Proprietatibus Rerum, furnishes the names of sundry other instruments, with a description of their several forms and uses, and contains besides, a brief discourse on the science of music in general. As translated into English by Trevisa, it is, for many reasons to be looked on as a great curiosity; for not to mention the great variety of learning contained in it, the language, style, and sentiment are such, as render it to a very great degree instructive and entertaining. Numberless words and phrases, not taken notice of by any of our lexicographers, and which are now either become totally obsolete, or are retained only in particular parts of this kingdom, are here to be met with, the knowledge whereof would greatly facilitate the understanding of the earlier writers. In short, to speak of the translation of Bartholomæus by Trevisa, it is a work that merits the attention of every lover of antiquity, every proficient in English literature. The latter part of the nineteenth and last book is wholly on music, and is unquestionably the most ancient treatise on the subject in the English language extant in print. The latter of these reasons would alone justify the insertion of it in this place.

A short account of Bartholomæus, and of this his work, together with some extracts from it, has been given in a foregoing chapter: here follows the proem to it, a singular specimen of old English poetry:—

Eternal lawde to God, grettest of myght
Be hertely yeue of euery creature,
Whyche of his goodnesse sendyth grace
To sondry folke as bleffyd auenture,
Whose spyryte of counsell comforteth full sure,
All fuche as luste to seeke for sapience,
And makyth them wyfe by grete intelligence.
As thus where men full naturally desire
Of sundry thynges and meruels for to knowe,
Of erthe, of ayre, of water, and of fire,
Of erbe and tree whych groweth both hyge and lowe,
And other thynges as nature hath them sowe,
Of thyfe the knowlege comyth by Goddis grace,
And of all thyng that reason may them brace.

Whan I beholde the thynges naturall,
Gadryd by grace sent from the Holy Ghoft,
Briefly compyled in bokes specyall,
As Bartholomewe sheweth and eke declayrth moft,
Than I rejoyce, remembreng euery coste,
How some coundree hath grete commodite,
Some rote, some frute, some stoon of hyghe degree.

Prayd be God, which hath so well enduyd
The auctor wyth grace de Proprietatibus
To se so many naturall thynges renewd,
Whych in his boke he hath compyled thus,
Where through by redynge we may comforte us,
And wyth conceytes-dyuers fede our mynde,
As bokes empyntid shewyth ryght as we fynde.

By Wyken de Worde, which through his diligence
Emprentyd hath at prayer and desyre
Of Roger Thorney, mercer, and from thens
This mocion sprange to sette the hertes on fyre
Of fuche a loue to rede in euery shire,
Dyuers maters in voydyng ydylnesse,
Eyke as this boke hath shewed to you expresse,

And many an other wonderful conceyte
Shewyth Bartholowe de Proprietatibus,
Whyche besyde hymselfe to take the swete receyte
Of holsum cunnynge, his tyme dispendynge thus,
Geuynge example of vertue glorious,
Bokes to cherysh, and make in sondry wise
Vertue to folowe and idlenesse to dyspyse.

For in this worlde, to rekon euery thyng
Plefure to man there is none comparable,
As is to rede and understandynge
In bokes of wysdome they ben so delectable,
Whiche sowne to vertue and ben profytable;
And all that loue fuche vertue ben full glade
Bokes to renewe and cause theym to be made.

And also of your charyte call to remembraunce
The foul of William Caxton, first prynter of this boke
In Laten tonge at Coleyn hymself to auance
That euery well disposyd man may thereon loke;
And John Tate the yonger joye mote he broke
Whiche late hathe in Englonde doo make this paper thynne
That now in our Englysh this boke is printed inane.

That yong and olde through plente may reioyse
To gyue theym self to good occupacion,
And ben experte as shewyth the comyn voyce,
To voyde alle vyce and defamacyon,
For idylnesse all vertue put adowne,
Than rede and studie in bokes vertuose,
So shall thy name in heuen be gloriose.

For yf one thyng myght last a M. yere,
Full sone comyth aage that fretteth all away;
But like as Phebus wyth hys beames clere
The mone repeyareth as bryght as on day,
Whan the is wastyd ryght so may we say
Thise bokes old and blinde, whan we renewe
By goodly pryntyng they ben bryght of hewe.

Then all that cause the good contynuaunce,
And helpe fuche werke in furtheryng to their mist
Ben to be sette in good remembraunce,
For fuche deserue reward of God all myght,
They put asyde both wyked thought and syght,
And cause full often ryghte good gouernaunce,
Wrouten whyche synne wold hym self auance.

Now glorious God that regnest one in thre,
And thre in one, graunt vertue myght and grace
Unto the prynter of this werke, that he
May be rewarded in thy heavenly place;
And whan the worlde shall come before thy face,
There to receyve according to desert
Of grace and mercy make hym then expert.

Batman, who, as is above said, in 1582 published an edition of the book *De Proprietatibus Rerum*, took great liberties with Trevisa's translation, by accommodating the language of it to his own time, a very unwarrantable practice in the editor of any ancient book; he may however be said in some respects to have made amends for this his error, by the additions of his own which he has occasionally made to several sections of his author. Here follows that part of the nineteenth book above referred to, taken verbatim from the edition of Wynken de Worde, with the additions of Stephen Batman, distinguished as they occur:—

De Musica.

'As arte of nombres and mesures seruyth to diuinite,
'so doth the arte of melody for musyk; by the whyche
'accorde and melody is knowe in sowne, and in songe
'is nedeful to know mystyke meanynge of holy writte;
'for it is sayd that the worlde is compownyd and made
'in a certayne and proporcion of armeny, as *Isyder*
'sayth *libro tertio*.

'And it is said that heuen gooth aboute wyth conso-
'nancye and accorde of melody. For musyk meuyth
'affeccions, and excyteth the wyttes to dyuerse dispo-
'sycyons. Also in bataylle the noye of the trompe
'comfertyth werryours, and the more stronge that the
'trompyng is, the more stronge and bolde men ben to
'fyghte: and comfertyth shypmen to suffre alle the
'dyscasses and trauelle. And comforte of voys pleaseth
'and comfertyth the hert, and inwyttes in all dyscasse
'and traueyle of werks and werynesse. And musyk
'abatyth maystry of euyl spyrytes in mankynde, as we
'rede of *Dauid* that delyuered *Saul* of an unclene spy-
'ryte by crafte of melodye. And musyk excyteth and
'comfertyth bestis and serpenes, foules and delphines
'to take hede therto; and so veynes and synewes of
'the body and puls therof; and so all the lymmes of
'the body ben socied togyder by vertue of armenye as
'*Isyder* sayth. Of Musyk ben thre partyes, Armonica,
'Rethmica, and Metrica. Armonica dystyngueth grete
'and smalle in sownes, and hyghe and lowe, and pro-
'porcionall chaungyng of voys and of sowne. And
'Armonia is swete accorde of songe, and cometh of
'due proporcion in dyuerse voyces, other blastes towch-
'ynge and smytyng sownes: for, as *Isyder* sayth, sowne
'comyth of voys, as of mouthe and jowes; other of
'blaste, as of trompes and pypes; other of touchinge
'and smytyng of cymbale and harpe; and other
'fuche that sowneth wyth smytyng and strokes.

• Isidore, bishop of Sevil.

'Voys comyth to one accorde, as *Hugucyon** sayth, 'for in all melodye nedyth many voys, other fownes, 'and that accordyng; for one voys pleasyth not so 'moche as the voys and fonge of the Gnokken, and† yf 'many dyscordith, the voys plesyth not; for of suche 'dyscorde comyth not fonge, but howlynge other 'yellynge; but in many voyces accordyng in one is 'proporcyon of armony and melodye other swete 'symphonia. And so *Isyder* sayth that symphonia is 'temperate modulacyon, accordyng in fownes highe 'and lowe. And by this armony hyghe voys accor- 'dyth, so that yf one discordyth it greueth the herynge; 'and suche accordyng of voys hyghte Euphonia, that is 'swetnesse of voys, and hyghte also Melodya, and hath 'that name of swetnesse and of Mel, that is Honey; 'and the contrary is called *Dyaphonia*, fowle voys and 'dyscordyng. To make melodye of armony nedyth 'diastema, diesis, tonus, iperludius, podorius, arsis, 'thesis, and swete voys and temperate fowne. Dia- 'stema is a couenable space of two voyces, other of 'moo, acordyng. Diesis is the space and doynge of 'melodye, and chaungyng out of one fowne in to 'another. Tonus is the sharpnesse of voys, and is 'difference and quantitie of armony, and standyth in 'accent and tenor of voys. And musicyons maketh 'thereof fyftene parties. *Iperludius* is the laste thereof 'and moost sharpest; and *Podorius* is moost heavy of 'alle, as *Isyder* sayth. *Arsis* is rerynge of voys, and is 'the beginning of fonge. *Thesis* is lettyng, and is the 'ende, as *Isyder* sayth; and so fonge is the bendyng of 'the voys, for some passeth streight, as he sayth, and 'is to fore fonge. And euery uoys is fowne, and not 'ayen warde; for fowne is the objecte of herynge, for 'all that is perceyved by herynge is called fowne, as 'breking of trees, smytyng togyder of stones, hurlyng 'and rushyng of waues and of wynde, chytteryng of 'byrdes, lowyng of beestys, voys and gronyng of 'men, and smytyng of organes. And a voys is 'properly the fowne that comyth of the mouthe of 'a beest; and fowne comyth of ayre smytte ayenst an 'harde body; and the smytyng is sooner seen than the 'fowne is herde, and the lyghtnyng is sooner seen than 'the thondre is herde. A voys is moost thynne ayre, 'smytte wyth the wreste of the tongue; and some voys 'sygnyfyeth and tokenyth by kynde, as chytteryng of 'byrdes and gronyng of fyke men. And some tokenyth 'at wylle, as the voys of a man that is ordeyned, and 'there shape by heste of reason to telle out certain 'wordes. The voys berith forthe the worde, and the 'worde that is in the thoughte maye not come oute 'but by helpe of the voys that it oute bryngeth. And 'so fyrst the inwytte gendrith a worde in the thoughte, 'and puttyth it afterwarde out at the mouthe by the 'voyce; and so the worde that is gendryd and con- 'teyned by inwytte, comyth oute by the voys as it 'were by an instrumente, and is knowe. The voyce 'that is dyspofyd to fonge and melodye hath thise 'propyrties, as *Isyder* sayth. Voyces he sayth ben

'smalle, subtyll, thicke, clere, sharpe, and shyll. In 'subtyll voys the spyryte is not strong, as in chyldren 'and in wymmen; and in other that haue not grete 'fynews, stronge and thicke; for of smalle strynges 'comyth smalle voys and subtyll. The voyces ben 'fatte and thicke whan moche spyryte comyth out, as 'the voys of a man. The voys is clere that fownyth 'well, and ryngeth wythout any hollownesse. Sharpe 'voyces ben full hyghe, shyll voys ben lowde, and 'drawth a longe, and fylleth soone all the place, as the 'noyce of trumpe. The harde voys is hofe, and also 'the harde voys is grymme and grysfely whan the fowne 'therof is vyolente, and as the fowne of thondre, and 'of a felde bete with grete malle. The rough voys is 'hofe and sparplyd by smalle, and is stuffyd and dureth 'not longe, as the fowne of erthen vessell. Voys '*uniuolenta*† is *neshe*§ and plyaunt. That name *uni- 'uolenta*, of *Viuo*,|| that is a lytyll belle neshly bende. 'The perfyghte voys is hyghe, swete, and stronge and 'clere; hyghe to be well herde, clere to fylle the eeres; 'swete to pleyse, and not to fere the herynge, and to 'comfort the hertes to take hede thereto. Yf ought 'herof sayleth, the voys is not perfyghte, as *Isyder* 'sayth. Here ouer is armonia of organes, that comyth 'of blaste whan certayn instrumentes ben craftely made 'and duly blowe, and yeuyth by quantyte of the blaste 'craftly, dyuers by dyuersite of organes and instru- 'mentes, as it fareth of organes, trompes, and pipes, 'and other suche that yeuyth dyuerse fownes and noyce. '*Organum* is a generall name of all instrumentes of 'musyk, and is nethelesse specyally a propyryte to the 'instrument that is made of many pipes, and blowe 'wyth belowes. And now holy chyrche useth oonly 'this instrument of musyk, in profes, sequences, and 'ympnes; and forsakyth for men's use of mynstrallye 'all other instrumentes of musyk.¶

'The *Turense* founde fyrste the trompe. *Virgil* 'spekyth of them, and sayth that the voys of the 'trompe of *Turane* lowyth in the ayre.** Men in olde 'tyme usyd trompes in battayle to fere and affraye 'theyr enemyes, and to comforte theyre owne knyghtes 'and fyghtyng men; and to comforte horse of werre 'to fyghte and to refe and smyte in the batayle; and 'tokenyth worship wyth vyctory in the fyghtyng, 'and to call them ayen that begyn to fle. And usyd 'also trompettes in feestys to call the people togider, 'and for besynesse in praysyng of God. And for 'cryenge of welthe of joye the *Hebrewes* were 'commaunded to blowe trompettes in batayle, in the 'begynnyng of the newe mone, and to crye and 'warne the comyng of the Jubile, the yere of grace 'with noyce of trompes, and to crye and reste to all 'men. As *Isyder* sayth *libro xviii*.º

'A trompe is properly an instrument ordeyned for 'men that fyghteth in batayle, to crye and to warne 'of the sygnes of batayle. And where the cryers 'voys maye not be herde for noyse, the noyse of the 'trompe sholde be herde and knowen. And *Tuba* 'hath that name as it were *Tona*, that is holowe

* Supposed to be Hugotio, duke of Pisan, in Greece; surnamed Fiagiolanus, from his being a scourge to the Florentines. He flourished about 1320, and was a man of letters, but his writings are not known. Batm.

† Cuckoo. Batm.

‡ Vinolenta. Batm. § Soft. Batm. ¶ Vino. Batm.

¶ Addition of Batman. º Or is for his loudnesse nearest agreeing to the voyce of man.

** 'Tirrenusque tubæ mugire per æthera clangor.'

‘wythin, and full smothe for to take the more brethe,
‘and is rounde wythout, and streyghte attē the tromp-
‘ers mouth, and brode and large at the other ende;
‘and the tromper with his honde putteth it to his
‘mouth, and the trompe is rulyd upwarde and down-
‘warde, and holde forth ryght; and is dyuerse of
‘noyse, as *Yfyder* sayth. For it is somtime blowe to
‘araye bataylles, and somtyme for that bataylles sholde
‘fmyte togyder, and sometyme for the chafe, and to
‘take men in to the hofte.

De Buccina.

‘*Buccina* hath the name as it were *vociua parua*,
‘and is a trompe of horne, of tree, eyther of brasse,
‘and was blowen ayenst enemyes in old tyme; for as
‘*Ijyder* sayth, *libro decimo octavo*, the wylde *Panems*
‘were somtyme gaderyd to al manere doynge wyth
‘the blowingge of fuche a manere trompe, and soo
‘*Buccina* was properly a token to wylde men. *Perfius*
‘spekyth herof, and sayth that *Buccina* made the olde
‘*Qwyrites* araye themselft, namely, in armoure. The
‘voys of fuche a trompe, hyght *Buccinium* as he sayth,
‘and the *Hebrewes* used trompes of horne, namely in
‘*Kalendus*, in remembraunce of the delyueraunce of
‘*Ysaac*, whanne an hornyd wether was offryd and
‘made oblation of in his stede, as the *Gloc.** sayth
‘super *Genesis*.†

De Tibia.

‘*Tibia* is a pype, and hath that name for it was
‘fyrfte made of legges of hartes, yonge and olde, as
‘men trowe; and the noyse of pypes was called *Oiber*,
‘as *Hugucion* sayth. This name *Tibia* comyth of
‘*Tibium*, that is a rushe, other a rede, and therof
‘comyth this name *Tibicen* a pype. And was som-
‘tyme an instrument of doole and lamentacyon, whyche
‘men dyde use in office and sepulchures of deed men, as
‘the *Gloc.* sayth super *Matth. ix.* and thereby the songe
‘was fonge of doole and of lamentacyon.

De Calamo.

‘*Calamus* hath that name of thys worde *Calando*,
‘fowning; and is the generall name of pypes. A pype
‘hyghte *Fistula*, for voyce comyth therof. For voyce
‘hyghte *Fest* in *Grewes*,§ and send, *Istola*|| in *Grewes*.
‘And soo the pype hyghte *Fistula*, as it were *sendyng*
‘oute voyce other fowne. Hunters useth this instru-
‘ment, for hartes louyth the noyse therof. But whyle
‘the harte taketh hede and likyng in the pypynge of
‘an hunter, another hunter whyche he hath no know-
‘lege of, comyth and shoteth at the harte and fleeth
‘hym. Pypynge begyleth byrdes and foules, therefore
‘it is sayd “the pype syngeth swetely whyle the fowler
‘begyleth the byrde.”¶ And shepe louyth pypynge,
‘therefore shepherdes usyth pipes when they walk wyth
‘theyr shepe. Therefore one whyche was callyd *Pan*
‘was callyd God of hirdes, for he joynd dyversē redes,
‘and arayed them to songe flyghly and craftely. *Virgil*

* i. e. The gloss or commentary.

† Batman. in a note on the trompe and buccina, says that the warnings in battle were ‘the Onset, the Alarum, and Retrate,’ and adds, ‘Some used the greates wilke shell in steed of a trumpet, some hornes of beastes, and some the thigh bones of a man, as do the Indians. In civil discorde the flute, the siff, and the cornet, made winding like the rammes horne.’

‡ Fos. Batm. § i. e. Greek. || Stolla. Batm.

¶ ‘Fistula dulces canit, volucrum dum decipit auceps.’ Caton. Dist. lib. i.

‘spekyth therof, and sayth that *Pan* ordeyned fyrst to
‘join [in one horne]** *Pan* hath cure of shepe and of
‘shepherdes. And the same instrument of pypes hyghte
‘*Pan donum*, for *Pan* was fynder therof as *Yfyder* sayth.
‘And wyth pipes watchynge men pleyfeth fuche men
‘as restyth in beddes, and makyth theym slepe the
‘sooner and more sweetly by melodye of pypes.††

De Sambuca.

‘*Sambuca* is the Ellerne tree brotyll, and the bowes
‘therof ben holowe, and voyde and smothe; and of
‘those same bowes ben pipes made, and also some
‘maner symphony, as *Yfyder* sayth.

De Symphonia.

‘The *Symphonie* is an instrument of musyke, and is
‘made of an holowe tree, closyd in lether in eyther
‘syde, and mynstralles bethyt it wyth flyckes; and by
‘accorde of hyghe and lowe therof comyth full swete
‘notes, as *Ijyder* sayth. Neuerthelesse the accorde of
‘all fownes hyghte *Symphonia*, is lyke wise as the
‘accorde of dyuerse voys hyghte *Cborus*, as the *Gloc.*
‘sayth super *Luc.*

De Armonya.

‘*Armonya Ritbinica* is a fownynge melodye, and
‘comyth of smyttyng of strynges, and of tynklyng
‘other ryngynge of metalle. And dyuerse instrumentes
‘seruyth to this manere armonye, as *Tabour*, and *Tym-*
‘bre, *Harpe*, and *Sawtry*, and *Nakyres*, and also *Sistrum*.

De Tympano.

‘*Tympanum* is layed freyghte to the tree in the one
‘side, and half a tabour other halfe a symphony, and
‘shape as a syfue,‡‡ and beten wyth a flycke; ryght as
‘a tabour, as *Ijyder* sayth, and maketh the better
‘melody yf there is a pype therwyth.

De Ciithara.

‘The harpe hyghte *Ciithara*, and was fyrst founde
‘of *Appollin*, as the *Grekis* wene; and the harpe is
‘like to a mannys breste, for lyke wyse as the voyce
‘comyth of the breste, soo the notes cometh of the
‘harpe, and hath therfore that name *Ciithara*, for the
‘breste is callyd *Thorica thicariuz*. And afterwarde
‘some and some,§§ came forth many manere instru-
‘mentes therof, and hadde that name *Ciithara*, as the
‘harpe, and sawtry, and other fuche.

‘And some ben foure cornerde, and some thre
‘cornerde; the strynges ben many, and specyall
‘manere therof is dyuerse.

‘Men in olde tyme callyd the harpe *Fidicula*, and
‘also *Fidicen*, for the strynges therof accordyth as well
‘as some men accordyth in Fey.||| And the harpe had
‘feuen strynges, and soo *Virgil* sayth *libro septimo*. Of
‘fowne ben feuen *Discrimina*¶¶ of voys, and ben as the

** ‘With wax manye pipes in one.’ Batm. on the authority of this passage: ‘Pan primos calamos cerā conjungere plures.’

†† Addition of Batman. ‘Pan, called the god of shepherdes: he is thought to be Demogorgon’s son, and is thus described; in his forehead he hath hornes like the sunbeames, a long beard, his face red like the cleer air; in his brest the star Nebris, the nether part of his body rough, his feet like a goate, and alway is imagined to laugh. He was worshipped, especialy in Arcadia. When there grew betwixt Phæbus and Pan a contention whether of them two should be judged the best musician; Midas preferring the bagpipe, not respecting better skill, was given for his reward a pair of asse eares.’

‡‡ i. e. A sieve. §§ At different times. ||| Faith.

¶¶ ‘Septem sunt soni, septem discrimina vocum.’

'nexte ftrynge therto. And ftrynges ben ieuē, for
'the fulleth alle the note. Other for heuen fownyth
'in feuen meuyngs. A ftrynge hyghte *Corda*, and
'hathe the same name of corde the herte; for as the
'puls of the herte is in the breste, soo the puls of the
'ftrynges is in the harpe. *Mercurius* founde up fyrste
'suche ftrynges, for he strenyd fyrste ftrynges, and
'made them to fowne, as *Isyder* sayth.

'The more drye the ftrynges ben streyned the more
'they fowne. And the wreste hyghte *Pletrum*.

De Psalterio.

'The Sawtry hyghte *Psalterium*, and hath that name
'of *Pfallendo*, syngyng; for the consonant answeryth
'to the note therof in syngyng. The harpe is lyke to
'the sawtry in fowne. But this is the dyuerfyttee and
'discorde bytwene the harpe and the sawtry; in the
'sawtry is an holowe tree, and of that same tree the
'fowne comyth upwarde, and the ftrynges ben smytte
'dounwarde, and fownyth upwarde; and in the harpe
'the holownesse of the tre is bynethe. The *Hebrewes*
'callyth the sawtry *Decacordes*, an instrument hauinge
'ten stringes, by nombre of the ten hestes or com-
'maundementes. Stringes for the sawtry ben beste
'made of laton, or elles those ben goode that ben
'made of syluer.

De Lira.

'*Lira* hath that name of dyuerfyttee of fowne; for
'the *Lira* geueth dyuerse fownes, as *Isyder* sayth. And
'some people suppose that *Mercurius* fyrste founde up
'this instrument *Lira* in this wyse. The river *Nylus*
'was flowen and aryfen, and afterward was aualyd
'and wythdrawen ayen in to his propre channelle.
'And leste in the felde many dyuerse beeftys, and also
'a snaylle; and whan the snaylle was rostyed the
'synewes left, and were streyned in the snaylles housse.
'And *Mercurius* smote the synewes, and of theym came
'a fowne. And *Mercurius* made a *Lira* to the lyknesse
'of the snaylles housse, and gave the same *Lira* to one
'that was namyd *Orpheus*, whiche was moost befy
'abowtte such thinges; and so it was sayd that by the
'same crafte, not oonly wylde beeftys drew to songe
'and melodye, but moreover stones and also wodes.
'And syngers in fables don meane that thys forsayd
'instrument *Lira* is sette amonge sterres for loue of
'study and prayfyng of song, as *Isyder* sayth.

De Cymbalis.

'*Cymbales* ben instrumentes of musyk, and ben smytte
'togider, and fowneth and ryngeth.*

De Sistro.

'*Sistrum* is an instrument of musyk, and hath the
'name of a lady that firste brought it up; for it is
'proued that *Isis*, quene of *Egypte*, was the first fynder
'of *Sistrum*: and *Juuenalis* spekyth therof and sayth,
'*Isis et irato feriat mea lumina sistro*. And wymmen
'wyth this instrument, for a woman was the fyrste
'fynder therof. Therefore among the *Amazones* the
'hoste of wymmen is callyd to bataylle with the
'instrument *Sistrum*.†

* Addition of Batman. 'Compassed like a hoope; on the upper com-
pass, under a certain holownesse hangeth halfe bells fyve or seaven.
† Addition of Batman. 'An instrument like a horn, used in battaile
'instead of a trumpet, also a brassen timbrell.'

De Tintinabulo.

'*Tintinabulum* is a belle, other at *Campenole*; and
'hath the name of *Tiniendo*, tynklynge or ryngyng.
'A belle hathe this propretye, that whyle he prouffyteth
'to other in fowninge, he is wastyd ofte by smytyng.
'Thyse instrumentes, and many other seruyth to musyk
'that treatyth of voyse and of fownes, and knoweth
'neuerthelesse dysposycyon of kyndly thynges, and pro-
'porcyon of nombres, as *Boicius* sayth; and settyth
'ensample of the nombre of twelue in comparyson to
'fyxe, and to other nombres that ben bytwene, and
'sayth in this wyse. Here we fyndeth all the accordes
'of musyk, from eyghte to fyxe, nyne to twelue, makyth
'the proporcyon *Sesquitercia*, and makyth togydre the
'consonancy *Dyapente*; and twelue to fyxe makyth
'dowble proporcyon, and syngyth the accorde *Diapason*.
'Eyghte to nyne in comparyson ben meane,
'and makyth *Epogdonus*, whych is callyd *Tonus* in
'melody of musyk, and is comin mesure of alle the
'fownes. And soo it is too understonde that bytwene
'*Dyateseron* and *Dyapente* tonus is dyuerfytte of ac-
'cordes; as bytwene the proporcyons *Sesquitercia* and
'*Sesquialtera* oonly *Epogdolis* is dyuerfytte, *but usque*
'*Boicius in secundo Arismetrice*† *capitulo ultimo*.

'And the melodye of musyk is nempnyd and callyd
'by names of the nombres. *Dyateseron*, *Dyapente*,
'and *Dyapason* haue names of the nombres whyche
'precedeth and gooth tofore in the begynnynge of
'those sayd names. And the proporcyon of theyr
'fownes is founde and had in those same nombres, and
'is not founde, nother had, in none other nombres.

'For ye shall understonde that the fowne and the
'accorde in *Diapason*, is of proporcyon of the dowble
'nombre; and the melodye of *Dyateseron* dooth come
'of *Epitrica collimie* that is *Sesquitercia proporcio*,

Quid sit numerus sesquialterus.

'The nombre *Sesquialterus* conteyneth other halfe
'the lesse nombre, as thre conteyneth twayne and the
'halfe deale of two, that is one: so nyne conteyneth
'fyxe and the halfe deale, that is thre. And so twelue
'to eyghte, and systene to ten, and so of other. Thise
'wordes ben in themselves deepe and full myftyk, derk
'to understondyng. But to them that ben wyse and
'cunnyng in arismetrik and in musyk, they ben more
'clerer than moche lyghte; and ben derke and alle un-
'knownen to them whyche ben uncunnyng, and haue
'no usage in arismetrik. Therefore he that woll knowe
'the forsayde wordes and proporcyons of nombres of
'voys and fownes, shall not dyspyse to aske counseyle,
'and to desyre to haue knowlege by those whyche ben
'wyser, and that haue more cunnyng in gemetry and
'musyk. And *Isyder* sayth that in termes and figures
'and accordes of musyk is so grete, that the felfe man
'stondeth not perfyghte there withoute, for perfyghte
'musyk comprehendyth alle thynges. Also reuolue and
'consydre herof in thy minde, that musyk and armonye
'unyeth and accordyth dyuerse thynges and contrary;
'and makyth the hie fowne to accorde wyth the lowe,
'and the lowe wyth the hygh: and accordyth con-

† Arithmetice.

'trary wylles and defyres, and refreynyth and abatyth
'mencyons and thoughtes, and amendyth and com-
'fortyth feble wyttes of felyuge, and cryeth namely,
'and warnyth us of the unytee of the exemplar of
'God in contrary werkynge; and dyuerfly mani-
'festeth and sheweth that erthly thynges may be joynd
'in accorde to heuently thynges; and causeth and maketh
'gladde and joyful hertes, more gladde and joyful, and
'fory hertes and elenge, more fory and elenge: for as
'*Auſtin* sayth by a preuy and secrete lyknesse of pro-
'pryete of the soule and of armonye, melodye con-
'fourmyth itselfe to the affeccyons and desires of the
'soule. And therefore auctores meanyth that instru-
'mentes of mufyk makyth the gladde more gladde,
'and the fory more fory. Loke other propyetes of
'armonye tofore in this same boke, whereas other
'wordes of *Iſyder* ben rehercyd and spoken of.'

To this brief but very curious discourse of Bartholomæus, his editor Batman has added a supplement, containing his own sentiments and those of sundry other writers on the subject. This supplement may be considered as a commentary on his author, but is too long to be here inserted.

CHAP. LXI.

THE foregoing extract may well be considered as a supplement to the several tracts contained in the Cotton manuscript and that of Waltham Holy Cross, of the contents whereof a copious relation has herein before been given; forasmuch as these treat in general on the nature of the consonances, the rudiments of song, the Cantus Gregorianus, and its application to the choral offices, the Cantus Mensurabilis, and the precepts of extemporary descant, and this of Bartholomæus contains such a particular account of the various instruments in use at the time of writing it, which, to mention it again, was about the year 1366, as it would be in vain to seek for in any manuscript or printed book of equal antiquity, as yet known to be extant.

It is true that in the account which he has given of the inventors of the several instruments described by him, Bartholomæus seems to have founded his opinion on vulgar tradition; and indeed in some respects he is contradicted by authors whose good fortune it was to live in more enlightened times, and from whose testimony there can lie no appeal. But rejecting his relation as fabulous in this respect, enough will be left in this little work of his to engage the attention of a curious enquirer into the history and progress of music; as it is from such accounts as this alone that we are enabled to form an estimate of the state of musical practice at any given period.

The several descriptions given by this author of the ancient trumpet made of a Horn, or of a Tree; of the Tibia, formed of the leg-bone of a hart; as also of the Fistula, seem to refer to the practice of the Hebrews and ancient Greeks; but nothing can be less artificial than the Sambuca, a kind of pipe, made, as he relates, of the branch of an Elder Tree; or that other instrument described by him in the chapter De

Symphonia, made of an 'holowe tree, cloyed in lether
'in eyther syde, whych mynstralles betyth wyth
'styckes; or of the Tympanum, 'layed streyghte to
'the tree, in shape as a syve, having halfe a tabour
'and halfe a symphony;' and which 'being beten
'with a stycke, makyth the better melodie yf there is
'a pype therwyth.'

These, and other particulars remarkable in the above-mentioned tract of Bartholomæus, bespeak, as strongly as words can do, the very low and abject state of instrumental music in his time; and were it not for the proofs contained in other authors, that the organ, the harp, the lute, and other instruments of a more elegant structure were in use at that time, would induce a suspicion that instrumental music was then scarcely known. But to what degrees of improvement these rude essays towards the establishment of an instrumental practice were carried in the space of about fourscore years, may be collected from the Liber Niger Domus Regis, before cited, in which is contained an account of the several musicians retained by Edward IV. as well for his private amusement, as for the service of his chapel, with their duties. Batman, in the additions made by him, seems to have discharged, as far as he was able, the duty of a commentator: and has given such an eulogium on the science of music as might be expected from a man of great reading and little skill, and such the author appears to have been. The account of the household establishment of Edward IV. above-mentioned, is contained in the following words:—

'MINSTRELLES thirteene, thereof one is virger, which
'directeth them all festyvall dayes in their statyones of
'blowings and pypynge to such offyces as the officeres
'might be warned to prepare for the king's meats and
'soupers; to be more redyere in all services and due
'tyme; and all thes sytyng in the hall together, whereof
'some be trompets, some with the shalmes and smalle
'pypes, and some are strange mene coming to this court
'at fyve feastes of the year, and then take their wages of
'houshold after iiij. d. ob. by daye, after as they have
'byne presente in courte,* and then to aroyd after the
'next morrowe after the feaste, besydes theare other re-
'wards yearly in the king's exchequer, and clothinge
'with the householde, wintere and somere for eiche of
'them xxs., and they take nightelye amongeste them all
'iiij galanes ale; and for wintere seasoone thre candles
'waxe, vj candles pich, iiij talesheids;† lodging suffy-
'tyente by the herbengere for them and their horses
'nightelye to the courte. Aulso having into courte ij ser-
'vants to bear their trompets, pypes, and other instru-
'ments, and torche for wintere nightes whylest they blowe
'to suppoere of the chaundry; and alway two of thes per-
'sones to contynewe stylla in courte at wages by the
'cheque rolle whyles they be presente iiij. ob. dayly, to
'warne the king's ridynge houshold when he goethe to

* i. e. According to the time, &c.

† TALSHEID or TALWOOD [Tallatura] is firewood cleft and cut into billets of a certain length. By a statute of 7 Edward VI. cap. 7. every Talshide marked j, being round-bodied, shall contain sixteen inches of assize in compass, &c. Cowel, in voce.

By the book of the earl of Northumberland's household establishment it appears that the liveries of wood were of so many *Shides* for each room, and of so many faggots for brewing and baking.

The distinction seems to have consisted in this, that Talshides or Talesheids were the larger timber, split and cut into a proper length for burning upon hearths in the apartments. And that faggots were made, as they now are, of the lops and branches of the trees.

Tal or *tale* prefixed to *shides* or *sheldes*, perhaps is derived from the French word *taillâ*, cut.

'horsebacke as oft as it shall require, and that his houshold meny maye followe the more redyere aftere by the blowinge of their trompets. Yf any of thes two minstrelles be lete bloode in courte, he taketh two loves, ij messe of greate meate, one galone ale. They part not at no tyme with the rewards given to the houshold. Also when it pleaseth the kinge to have ij mynstrelles continuinge in courte, they will not in no wise that thes mynstrelles be so famylliere to aske rewards.

'A WAYTE, that nightly from Mychelmas to Shreve Thorsdaye pipethe watche within this courte fowere tymes; in the somere nightes iij tymes, and makethe Bon Gayte at every chambere, doare, and offyce, as well for feare of pyckeres and pillars. He eatethe in the halle with mynstrelles, and takethe lyverey at nighte a loffe, a galone of alle, and for somere nightes ij candles piche, a bushel of coles; and for wintere nightes halfe a loffe of bread, a galone of alle, iij candles piche, a bushel of coles; daylye whilst he is presente in courte for his wages in cheque roale allowed iij. d. ob. or else iij. d. by the discesshon of the steuarde and tressorore, and that aftere his cominge and deservinge: also cloathing with the houshold yeomen or mynstrelles lyke to the wages that he takethe; and he be sycke he taketh twoe loves, ij messe of great meate, one galone alle. Also he partethe with the houshold of general gyfts, and hathe his beddinge carried by the comptrolleres assygment; and under this yeoman to be a groome watere. Yf he can excuse the yeoman in his absence, then he takethe reward, clotheinge, meat, and all other things lyke to other grooms of houshold. Also this yeoman-waighte, at the making of knightes of the Bathe, for his attendance upon them by nighte-time, in watchinge in the chappelle, hathe to his fee all the watchinge-clothing that the knight shall wear uppon him.

'DEANE OF THE CHAPPELLE, caled the king's Cheefe Chaplene, syttinge in the hall, and served after a barone service, begynninge the chappell bourd, havinge one chappelene, and one gentleman eatyng in the halle, and lyverey to his chambere for all daye and nighte iij loaves, ij messe of greate meate, a picher of wyne, two gallones of ale; and for wintere seaseone one torche, one picher, ij candles waxe, iij candles pich, iij talsheids, lyttre, and rushes all the year of the serjante usher of the hall and chambere, and the duties of the king's charges; and all the offerings of waxe in Candlemas-daye of the hole housholde by the king's gyffe, with the fees of the beene sat uppe in the feastes of the yeare when it is brente into a shasmonde. Also this deane is yearly clothing with the houshold for winter and somere, or else in moneyes of the comptyng-house viij markes, and carradge for his competente hernes in the offyce of vesterye, by oversyght of the comptrolere, and keepynge in all within this courte iij persones; and when himself is out of court his chamberlene eatethe with the chamberlenes in the halle. The deane come agayne, he must have lodginge suffityente for his horses by the herbeneger, and for his other servants in the toun or contrey; also he hathe all the swards that all the knights of the Bathe offere to Gode in the king's chappelle, as ofte as any shall be made. This dean is curate of confesshon of houshold.

'This deane hath all correctyones of chappellen, in moribus et scientia; except in some cases to the stuard and comptyng-house; he nor non of the chappell partethe with the houshold of noe general gyfts excepte vestire.

'CHAPLENES, AND CLERKES OF THE CHAPPELLE xliij.

* i. e. According to his attendance and deserts. The word *after* is here to be taken in the sense above given of it.

'by the deane's electtyone or denomenatyone, endowed with virtues morrolle and specikatyve, as of the muscke, shewing in descante, cleane voyced, well releashed in pronounsynge. Eloquent in readinge, suffityente in organes playinge, and modestial in all other havour, syttinge in the hall together at the deane's board, also lodginge together within the courte in one chambere, or else nighe thertoo. And every eiche of them beinge in courte, for his dayly wages allowed in the cheque rolle, vij. ob. And for every eiche of them clothinge in wintere and somere, or else of the comptyng-house xs., and lyvery to their chamberes nightly amongst them all ij loves of breade, j picher of wyne, vj galones of ale. And for wintere lyvery from Alholontyde till Estere, amongst them all ij candles waxe, xij candles pich, viij talsheids. Thei parte not with any tythes of houshold at noe tyme, but yf it be given unto the chappelle alone. Also they pay for their carriage of beddinge and harnesse, taking all the year for their chambere, lyttre and rushes of the serjante usher of the hall; and havinge into this courte for every eiche of these chaplenes, being preeste, one servante; and for every twoe gentlemen clerkes of the chappelle, one honeste servante, and lyverye suffityente for their horses and their servants nighe to the towne. The king's good grace avauncethe thes people by prebends churches of his patremonye, or by his highness recomendatorye, and other free chappelles or hospitalles. Oore Lady Masse preestes and the gospellers are assigned by the deane; and if any of thes be let bloode in courte, he taketh dayly ij loves, one messe of great meate, one messe of roste, one galone of ale; and when the chappelle syng mattenes over nighte, called Black Mattynes, then they have allowed spice and wine.

'YEOMEN OF THE CHAPPELLE, twoe, called Pistelers, growinge from the chiltren of the chappelle by successyone of age; and aftere the change of their voyces, and by the deane's denomenatyon, and after theire conninge and virtue: thes twoe yeomen eatynge in the halle at the chappelle board, take dayly when they be presente in court abyding the nighte, for their wages allowed in the cheque roles iij. d. and clothinge playne with the yeomen of houshold, and carryadge for their competente beddyng with the children of the chappelle; or else eiche of them at reward liij. s. iij. d. by the yeare, aftere the discreyson of stuard and tresorore.

'CHILDREN OF THE CHAPPELLE viij, founden by the king's privie cofferes for all that longethe to their apperle by the hands and oversyghte of the deane, or by the Master of Songe assigned to teache them, which mastere is appointed by the deane, chosen one of the number of the felowshipe of chappelle after rehearsed, and to drawe them to other schooles after the form of Sacotte,† as well as in Songe in Orgaines and other. Thes childrene eate in the hall dayly at the chappell boarde, nexte the yeomane of vestery; taking amongst them for lyverye daylye for brekefaste and all nighte, two loves, one messe of great meate, ij galones ale; and for wintere seaseone iij candles piche, iij talsheids, and lyttre for their pallets of the serjante usher, and carryadge of the king's coste for the competente beddyng by the oversyghte of the comptrolere. And amongst them all to have one servante into the court to trusse and bear their harnesse and lyverey in court. And that day the king's chappelle removeth every of thes children then present receaveth iij. d. at the green clothe of the comptyng-house for horshire dayly, as long as they be jurneinge. And when any of these children comene to

† Epistellers, readers of the epistles. We read also of Gospellers in this and other chapel establishments.

† Of this word no explanation is given by any of the lexicographers.

'xviij yeares of age, and their voyces change, ne cannot be preferred in this chappelle, the nombere being full, then yf they will assente "the kinge assynethe them to a colledge or Oxeford or Cambridge of his foundacion, there to be at fynding and studye bothe suffytently, tyll the kinge may otherwise advaunse them."

'CLERKE OF THE KING'S CLOSETTE keepe the stuff of the closete, arrayeng and makinge redye the aulteres, takinge upe the traverse, bering the cushones and carpetts, and fytethe all other things necessarye therto. He helpethe the chaplenes to saye masse; and yf the clarks lefe torche, tapore, mortere of waxe,† or such other goinge of the tresorore of houshold, his charge in any parte, then he to answere therefore as the judges of the green clothe will awarde. Also he eatethe in the hall with the serjante of the vestery by the chappelle, and takinge for his lyverey at nighte a galone ale, and for wintere lyverey ij candles piche, a talesheid, rushes for the clossete, and lytere for his bede, of the serjante ushere; and dayly for his wages in courte by the cheque roule ij. d. ob. and clothing for wintere and somere with the houshold, or else xx s. and at every eiche of the iiij feasts in the year fceavinge of the great spicery a towelle of worke, contayning iiij elles, for the king's houselynge, and that is the clerk's fee anon the king is housed. He partethe not with the gyfts of houshold, but and he be sycke in courte, he taketh ij loves, j messe of great mette, one galone ale, and lyverey of the herbergere; and for the cariage of the closete is assyned one sompter horse, and one somptere man, of the tresorore's charge, by the comptrollore his oversyght; the chamberlene is this clark's auditore and apposore.‡

'MASTER OF THE GRAMERE SCHOLE, "quem necessarium est in poeta, atque in regulis positive gramaticæ expeditum fore, quibus audiencium animos cum diligentia instruit ac infermet." The king's henxemene the children of the chappelle after they cane their descante, the clarks of the Armorye§ with other mene and childrene of the courte, disposed to learn in this syence; which master amonge yf he be preeste, muste syng our Lady Masse in the king's chappelle, or else amonge to reade the gospell, and to be at the greate processyone; this to bee by the deane's assygnacyone; takinge his meate in the halle, and lyverey at nighte a galone of ale; and for wintere lyverey one candle piche, a talesheid, or one faggote; and for his dayly wages allowed in the cheque role, whylest he is presente in courte, iiij. d. ob. and clothing with the housholde for winter and somere, or else xx. s. cariage for his competente beddyng and bokes with the childrene of the chappelle, by comptrollemente, not partyng with noe gyftes of housholde, but abydinge the king's avancement after his demerits; and lyverey for his horses by the king's herbengere; and to have in his court one honeste servante.¶

Of minstrels in general, and of the nature of their employment, an account has already been given, as also of the method practised to keep up a succession of them in the king's palace. By the above provision

* This seems to be a more formal establishment of the kind than any that we know of in these times or before, but it seems to have been founded in ancient usage; for we have it from Seiden that it was the old way 'when the king had his house, there were canons to sing service in 'his chapel'; so at Westminster. In St. Stephen's-chapel, where the House of Commons sits; from which canons the street called Canon-row has its name. Table-Talk, tit. King of England, § 4.

† *Mortua à Mortarium*, a light or taper set in churches, to burn possibly over the graves or shrines of the dead. Cowel.

‡ The word *apposor* signifies an examiner. In the court of Exchequer is an officer called the foreign *apposor*. Cowel in art. In the office of confirmation, in the first iturgy of Edw. VI. the rubric directs the bishop, or such as he shall appoint, to *oppose* the child; and anciently a bishop's examining chaplain was called the bishop's *posor*.

§ i. e. Almonry.

¶ Vide Catal. Libror. MSS. Biblioth. Harl. Numb. 293.

it appears that the minstrel's was not altogether a vagabond profession; but many of those that followed it were retainers to the court, and seem to have been no other than musicians, players on instruments of divers kinds. Dr. Percy, in his *Reliques of ancient English Poetry*, has obliged the world with an essay on the ancient English minstrels, in which he has placed in one point of view a great number of curious particulars that tend to illustrate this subject.

And here it may be observed, that the order and oeconomy in the families of the ancient nobility bore a very near resemblance to that of the royal household, of which there cannot be clearer evidence than the liberal allowances for minstrels; and also chapels, with singing-men, children, and proper officers for the performance of divine service in such families. In that of the ancient earls of Northumberland was an express establishment for minstrels, and also a chapel; an account for the latter will hereafter be given from the household-book of Henry, the fifth earl of Northumberland; that relating to the minstrels, contained in the same book, is as follows:—

Sect. V.

'Of the noubre of all my lord's servaunts in his chequir-roul daily abidyng in his household.

'MYNSTRALS iiij, viz., a tabret, a luyte, and a rebecc.'

Sect. XLIV. 2.

'Rewardes to be given to strangers, as players, mynstrails, or any other, &c.

'Furst, my lorde usith and accustomyth to gyf to the King's JUGLER, if he have wone, when they custome to come unto hym yerely, vi. s. viij. d.

'Item, My lorde usith and accustomyth to gyf yerely to the king's or queene's Barwarde, if they have one, when they custom to com unto hym yerely, vi. s. viij. d.

'Item, My lorde usith and accustomyth to gyf yerely to every erlis MYNSTRALLIS, when they custome to come to hym yerely, iiij. s. iiij. d. And if they come to my lorde seldome ones in ij or iij yeres, than vj. s. viij. d.

'Item, My lord usith and accustomyth to gyf yerely to an erlis MYNSTRALL, if he be his speciall lorde, frende, or kynsman, if they come yerely to his lordship, . . . And if they come to my lord seldome ones in ij or iij yeares, vj. s. viij. d.

'Item, My lorde usith and accustomyth to gyf yerely a dooke's or erlis TRUMPETTS, if they cum vj together to his lordship, viz., if they come yerely vj. s. viij. d.

'And if they come but in ij or iij yeres, than x. s.

'Item, My lorde usith and accustomyth yerly, whan his lordship is at home, to gyf to iiij the kyng's SHAMES, whether they com to my lorde yerely x. s.

Sect. XLIV. 3.

'Rewardes to his lordship's servaunts, &c.

'Item, My lord usith and accustomyth to gyf yerly, when his lordship is at home, to his MYNSTRALLS that be daly in his houshold, as his tabret, lute, ande rebeke, upon New Yeres-day in the mornyng, when they doo play at my lordis chambre doure, for his lordschipe and my lady xx. s. viz., xij. s. iiij. d. for my lord, and vi. s. viij. d. for my lady, if sche be at my lordis fyndyng and not at hir owen; and for playing at my lordis sone and heir chambre doure, the lord Percy, ij. s. And for playinge at the chambre doures of my lords yonger sonnes, my yonge maisters, after viij. d. the pece for every of them.—xxij. s. iiij. d.'

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This establishment, though no older than about the third year of the reign of Henry VIII. is not to be considered as a novel institution; on the contrary it appears to be a recognition of that rule and order which had been observed in the family for ages preceding; and that minstrels were formerly persons of some consideration, at least in the northern parts of the kingdom, may be inferred from an inscription still legible on a pillar in the ancient church of St. Mary, at Beverley, in Yorkshire. It seems that to the expense of erecting this fabric the nobility and gentry of the town and its neighbourhood were voluntary contributors: one of the pillars that support it was built by the minstrels, in memory whereof the capital is decorated with the figures of five men, carved in stone, dressed in short coats; one of these bears in his hand an instrument of a rude form, but somewhat resembling a lute, and under this sculpture are these words in ancient characters, *Thys pillar made the Minstrells*.

The chapel establishment of this noble family was perhaps less ancient, and might have been borrowed from that of Edward the Fourth, contained in the foregoing account of his household; it was nevertheless very noble, and will be given in a subsequent part of this work.*

JOHN of DUNSTABLE, so called from the town of that name in the county of Bedford, where he was born, seems to have been a very learned man, and an excellent musician. He flourished about the year 1400, and was the author of a tract *De Mensurabilis Musica*. Gaffurius, in his *Practica Musicæ*, lib. II. cap. vii. has cited him by the name of Donstable, and has produced an example from a hymn of his composition, beginning 'Veni sancte spiritus,' to explain a passage in that work. Morley has named him in his catalogue of English practitioners; and he elsewhere appears to have been a very considerable man in his time.† He is said to have died in 1455, and to have been buried in the parish church of St. Stephen, Walbrook, in London. In Fuller's *Worthies*, Bedfordshire, 116, is the following epitaph on him:—



'for these be his owne notes and words, which is one
'of the greatest absurdities which I have seene com-

* Besides the Minstrels that were retainers to great houses, there appear to be others of a vagrant class. The following note to that purpose is taken from the Appendix to Hearne's *Liber Scaccarii*, Numb. XII. pag. 598, Lond. 1771:—

'The fraternity of the Holy Crosse in Abingdon, in H. 6. tyme, being there were nowe the hospital is, did every yeare keep a feast, and then they used to have twelve prestes to sing a dirige, for which they had given them fourpence a pece. They had also twelve minstrells, some from Coventre, and some from Maydenhith, who had two shillings and three-pence a-pece, besides theyre dyet and horse meat; this was in the raigne of H. 6. Observe that in those dayes they paid there mynstrells better than theyre prestes.'

† Johannes Nucius, in his *Præceptiones Musices Poeticæ*, printed in 1613, expressly asserts that he was the inventor of musical composition. If by this we are to understand composition of music in more parts than one, there is an end of a question that has long divided the learned, namely, whether symphoniac music be an ancient or modern invention. That it had its origin in the practice of extemporary descant, mentioned in the account hereinbefore given of Bede, and of the singing of the Northumbrians, his countrymen, described by Giraldu Cambrer sis, is more than probable, but the precise time when written descant first came into use is so where ascertained. The works of Franchinus contain

Claudatur hoc tumulo qui cœlum pectore clausit,
Dunstable I, juris astrorum conscius ille,
Judice novit hieramis abscondita pandere cœli;
Hic vir erat tua laus, tua lux, tua musica princeps,
Quique tuas dulces per mundum sparserat artes
Anno Mil. C. quater, semel L. tria jungito Christi
Pridie natale sidus transmigrat ad astra
Suscipiant proprium civem cœli sibi cives.

And in Fuller are also these verses, written, as it is said, by John Whethamsted, abbot of St. Alban's.

Musicus hic Michalus alter, novus et Ptolomæus
Junior ac Atlas supportans robore cœlos,
Pausat sub cinere; melior vir muliere,
Nunquam natus erat; vitii quia labe carebat,
Et virtutis opes possedit unicus omnes.
Perpetuis annis celebretur fama Johannis
Dunstable; in pace requiescat et hic sine fine.

Fuller, who seeks all occasions to be witty, speaking of these two compositions, uses these words: 'What is true of the bills of some unconscionable tradesmen, if ever paid overpaid, may be said of these hyperbolical epitaphs: if ever believed over believed, yea one may safely cut off a third in any part of it, and the remainder will amount to make him a most admirable person. Let none say that these might be two distinct persons; seeing besides the concurrence of time and place, it would bankrupt the exchequer of nature to afford two such persons, one Phoenix at once being as much as any one will believe.' Morley, in his *Introduction*, pag. 178, has convicted this author of no less a crime than the interposing two rests, each of a long, between two syllables of the same word. The passage is as follows: 'We must also take heed of separating any part of a word from another by a rest, as some Dunces have not slackted to do; yea one, whose name is Johannes Dunstable, an ancient English author, hath not onlie divided the sentence, but in the verie middle of a word hath made two long rests thus, in a song of four parts upon these words: "Nesciens virgo mater virum":—

'mitted in the dytting of musicke.' The passage cited by Morley is certainly absurd enough; but that he was betrayed into an illiberal reflection on his author's supposed want of understanding by the tempting harmony of Dunce and Dunstable will hardly be doubted.

Franchinus, or as he is otherwise called Gaffurius, frequently cites a writer on music named MAR-CHETTUS: this author was of Padua; he lived about the year 1400, and wrote a treatise entitled *Luci-*

sundry examples of music in parts, but before his time we meet with nothing of the kind. Morley takes notice of this in the annotations on the second part of his *Introduction*, and says, 'In all the workes of them who have written of musicke before Franchinus, there is no mention of any more parts than one; and if any did sing to the harpe, they sung the same which they played.' A modern German writer, Francis Luitg. in his *Musikkunde* has mistaken the sense of Nucius in the passage above-cited, by ascribing the invention of music in parts to St. Dunstan, archbishop of Canterbury, instead of John of Dunstable, who, as above is shown, had no title to the merit of it.

darium in Arte Musice plane, and another De Musica mensurata.

PROSDOCIMUS DE BELDEMANDIS, of Padua, flourished about the year 1403. He wrote several tracts on plain and mensurable music, and was engaged in a controversy with Marchettus; but he is most frequently mentioned as the commentator of De Muris, on whose treatise entitled *Practica Mensurabilis Cantus*, he wrote a learned exposition. Besides being an excellent musician, he is celebrated as a philosopher and astrologer: the latter character he owed to a tract De Sphæra of his writing.

JOHANNES TINCTOR, a doctor of the civil law, arch-deacon of Naples, and chanter in the chapel of the king of Sicily, lived about this time, but somewhat prior to Franchinus, who cites him in several parts of his works. He wrote much on music, particularly on the measures of time, on the tones, and a tract entitled *De Arte Contrapuncti*.*

ANTONIUS SUARCIALUPUS, a Florentine, about the year 1430, excelled so greatly in music, that numbers came from remote parts to hear his harmony. He published some things in this art, but the particulars are not known. The senate of Florence in honour of his memory, caused a marble statue of him to be erected near the great doors of the cathedral church.†

ANGELUS POLITIANUS, a person better known in the learned world as one of the revivers of literature in the fifteenth century, than for his skill in the science, was nevertheless a writer on, and passionate admirer of music. His *Panepistemon*, or *Prælectiones*, contains a discourse De Musica naturali, mundana, et artificiali. Glareanus mentions him in two or three places of his *Dodecachordon*, as having misapprehended the doctrine of the ancient modes. Indeed he has not stuck to charge him with an error, which stares the reader even of the title-page of the *Dodecachordon* in the face; for in a catalogue of fourteen modes, which form the title page of that work, the Hyperphrygian mode, with the letter F prefixed occurs, with this note under it, 'Hyperlydius Politiani; sed est error.' He flourished about the year 1460, and acquired such a reputation for learning and eloquence, that Laurence de Medicis committed to his care the education of his children, of whom John, afterwards pope Leo the tenth, was one. The place of his residence was a mountain in Tuscany, to which in honor of him, the appellation of Mons Politianus, by the Italians corrupted into Monte Pulciano, was given. Though an ecclesiastic and a dignitary of the church, for it seems he was a canon, he is represented by Mons. Varillas as a man of loose morals, as a proof whereof he relates the following story: 'Ange Politien, a native of Florence, who passed for the finest wit of his time in Italy, met with a fate which punished his criminal love. Being professor of eloquence at Florence, he unhappily became enamoured of one of his young scholars who was of an illustrious family, but whom he could neither corrupt by his great presents, nor by the force of his eloquence. The

vexation he conceived at this disappointment was so great as to throw him into a burning fever; and in the violence of the fit he made two couplets of a song upon the object with which he was transported. He had no sooner done this than he raised himself from his bed, took his lute, and accompanied it with his voice, in an air so tender and affecting, that he expired in singing the second couplet.' Mons. Balzac gives a different account of his death. He says that as he was singing to the lute, on the top of the stair-case, some verses which he had formerly made on a young woman with whom he was then in love, the instrument fell out of his hand, and he himself fell down the stairs and broke his neck.

Bayle has refuted both these stories, and assigned good reasons to induce a belief that the sole cause of Politian's untimely death, was the grief he had conceived for the decay of the house of Medicis, to which he had great obligations.

CHAP. LXII.

THE several writers herein before enumerated, and mentioned to have lived after the time of Boetius, were of liberal professions, being either ecclesiastics, lawyers, physicians, or general scholars: nevertheless there was a certain uniformity in their manner of treating the subject of music, that seemed to preclude all theoretic improvement. Boetius had collected and wrought into his work the principal doctrines of the ancients; he had given a general view of the several opinions that had prevailed amongst them, and had adopted such as he thought had the most solid foundation in reason and experiment. The accuracy with which he wrote, and his reputation as a philosopher and a man of learning, induced an almost implicit acquiescence in his authority.

This was one reason why the succeeding writers looked no farther backward than to the time of Boetius for their intelligence in harmonics; but there was another, which, had their inclination been ever so strong to trace the principles of the science to their source, must have checked it, and that was a general ignorance throughout the western empire of the Greek language. The consequence hereof was, that of the many treatises on music which were written between the end of the sixth, and the beginning of the twelfth century, if we except such as treated of the scale as reformed by Guido, the ecclesiastical tones, and the *Cantus Mensurabilis*, the far greater part were but so many commentaries on the five books De Musica of Boetius: and this almost impossibility of farther explaining the theory of the science was so universally acknowledged, that of the candidates for academical honours, the principal qualifications required were a competent knowledge of his doctrines.

But though all improvements in the Theory of music may seem to have been at a stand during this period of five centuries, or a longer, for it may be extended backward to the time of Ptolemy, it is sufficiently clear that it fared otherwise with the Practice. Guido, who does not appear to have ever read the

* Walth. Mus. Lex.

† Voss. De Scient. Mathem. cap. ix. sect. 14.

Greek writers, effected a very important reformation of the scale; and, by an invention perfectly new, facilitated the practice of singing with truth and certainty. Some add that he was also the inventor of music in consonance; but of this the evidence is not so clear as to preclude all doubt. Franco invented, and De Muris and others perfected, the *Cantus Mensurabilis*; and these improvements were of a nature so important, that they extended themselves to every country where the practice of music prevailed, and in short pervaded the whole civilized world.

As to the science of harmonics, it had retreated to that part of the world, which, upon the irruption of the Goths into Europe, became the seat of literature, Constantinople; thither we may reasonably suppose the several works of Aristoxenus, Euclid, and other ancient harmonicians, perhaps the only remaining books on the subject that escaped the wreck of learning, were carried; and these were the foundation of that constitution, which we are expressly told came from the East, the ecclesiastical tones. It does not indeed appear that the science received any considerable improvement from this recess, since of the few books written during it, the greater part are abridgments, or at best but commentaries on the more ancient writers; and of this the treatises of Marcianus Capella, Censorinus, Porphyry, and Manuel Bryennius, are a proof, and indeed the almost impossibility of any such improvement after Ptolemy is apparent; for before his time the enarmonic and chromatic genera were grown into disuse, and only one species of the diatonic genus remained: nay, it is evident from the whole tenor of his writings, and the pains he has taken to explain them, that the doctrine both of the genera and of the modes was involved in great obscurity: if this was the case in the time of Ptolemy, who is said to have lived about the year 139, and the practice of music had undergone so great a change as arose from the reduction of the genera with their several species to one or two at most, and the loss of the modes, all that the ancients had taught became mere history; and the utmost that could be expected from a set of men who lived at the distance of some centuries from the latest of them, was that they should barely understand their doctrines.

All Theoretic improvement being thus at a stand, we are not to wonder if the endeavours of mankind were directed to the establishment and cultivation of a new Practice; and that these endeavours were vigorously exerted, we need no other proof than the zeal of the ancient Greek fathers to introduce music into the service of the church, the institution of the ecclesiastical tones, the reformation of the scale, and the invention of the *Cantus Mensurabilis*.

The migration of learning from the east to the west, is an event too important to have escaped the notice of historians. Some have asserted that the foundation of the musical practice now in use was laid by certain Greeks, who, upon the sacking of Constantinople by the Turks under Mahomet the Great, in 1453,* retired from that scene of horror

* This important event gave rise to a proverbial expression, usually applied to persons that suddenly became rich: 'He hath been at the sacking of Constantinople.' Sir Paul Rycaut's *History of the Turks*, vol. I. pag. 236.

and desolation, and settled at Rome, and other cities of Italy. To this purpose Mons. Bourdelot, the author of *Histoire Musique et ses Effets*, in four small tomes, relates that certain ingenious Greeks who had escaped from the sacking of Constantinople, brought the polite arts, and particularly music, into Italy: for this assertion no authority is cited, and though recognized by the late reverend and learned Dr. Brown, it seems to rest solely on the credit of an author, who, by a strange abuse of the appellation, has called that a history, which is at best but an injudicious collection of unauthenticated anecdotes and trifling memoirs.

To ascertain precisely the circumstances attending the revival of learning in Europe, recourse must be had to the writings of such men as have given a particular relation of that great event; and by these it will appear, that before the taking of Constantinople divers learned Greeks settled in Italy, and became public teachers of the Greek language; and that Dante, Boccace, and Petrarch, all of whom flourished in the fourteenth century, availed themselves of their instructions, and co-operated with them in their endeavours to make it generally understood. The most eminent of these were Leontius Pilatus, Emanuel Chrysoloras, Theodorus Gaza, Georgius Trapezuntius, and cardinal Bessarion. To these, at the distance of an hundred years, succeeded Joannes Argyropylus, Demetrius Chalcondyles, and many others, whose lives and labours have been sufficiently celebrated.†

It no where appears that any of these men were skilled in music; on the contrary, they seem in general to have been grammarians, historians, and divines, fraught with that kind of erudition which became men who professed to be the restorers of ancient learning. Nor have we any reason to believe that the practice of music had so far flourished in the eastern part of the world, as to qualify any of them to become public teachers of the science. It is true that music had been introduced by St. Basil, Chrysostom, and others of the Greek fathers, into the service of the church, and that the emperor Constantine had sent an organ as a present to Pepin king of France; but it is as true that all the great improvements in the art were made at home. Pope Gregory improved upon the Ambrosian chant, and established the eight ecclesiastical tones; Guido reformed the scale, and Franco invented the *Cantus Mensurabilis*; and the very term *Contrapunto* bespeaks it to have sprung from Italy.

From these premises it seems highly probable that it was not a Practice more refined than that in general use, nor an improved Theory which these persons brought from Constantinople, but that the introduction of the ancient Greek harmonicians, together with

† Bayle has given a particular account of some of the most eminent of them, as namely cardinal Bessarion, and a few others; but a summary of their lives, and a history of that important era is contained in a valuable work of Dr. Humphrey Hody, lately published by Dr. Samuel Jebb, entitled '*De Græcis Illustribus Linguae Græcæ Literarumque Humaniorum Instauratoribus*.' The names of the persons chiefly celebrated in this work, besides those above-mentioned, are Nicolaus Secundinus, Joannes Andronicus Callistus, Tranquillus Andronicus, Georgius Christonymus, Joannes Polo, Constantinus Lascaris, Michael Marullus, Manilius Rhalus, Marcus Musurus, Angelus Calabrus, Nicolaus Sophianus, Georgius Alexander, Joannes Moechus, Demetrius Moechus, Emanuel Adramytenuus, Zacharias Callergus, Nicolaus Blastus, Aristobulus Apostolus, Demetrius Ducas, Nicetas Phauustus, Justinus Corcyraeus, Nicolaus Petrus, Antonius Eparchas, Matthæus Avarius, Hermodorus Zacynthius.

such a knowledge of the language as enabled the professors of music in Italy and other countries to understand and profit by their writings, is the ground of that obligation which music in particular owes them.

The probability of this conjecture will farther appear when we reflect on the opinion which the Italians entertain of the rise and progress of music in Europe, and that is, that Guido for the practice, and Franchinus for the theory, were the fathers of modern music. How well founded that opinion is with respect to the latter of these two, will appear from the account of him which will shortly hereafter be given, and from the following view of the state of music in those countries, that made the greatest advances as well in scientific as literary improvements.

It seems that before the time of Franchinus the teachers of music in Italy were the monks, and the Provençal musars, violars, &c., the former may be supposed to have taught, as well as they were able, the general principles of harmony, as also the method of singing the divine offices, and the latter the use of instruments: it seems also that about the middle of the fifteenth century the Jews were great professors of music, for by a law of Venice, made in the year 1443, it appears that one of their chief employments at that time was the teaching children to sing; and they are thereby expressly forbidden to continue it, under severe penalties.

In France it is observable, that after the introduction of Guido's system into that kingdom, the progress of music was remarkably slow; one improvement however seems to have had its rise in that country, namely, *Fauxbourdon*, or what we in England were used to term *Faburden*, the hint whereof was probably taken from the *Cornamusa* or bagpipe; and of this kind of accompaniment the French were so extremely fond, that they rejected the thought of any other; nay, they persisted in their attachment to it after the science had arrived to a considerable degree of perfection in Italy and other parts of Europe.

In Germany the improvements in music kept nearly an even pace with those in Italy. Indeed they were but very few; they consisted solely in the formation of new melodies subject to the tonic laws, adapted to the hymns, and other church offices, which were innumerable; but the disgusting uniformity of these left very little room for the exercise of the inventive faculty: * the Germans indeed appear to have attained to great perfection in the use of the organ so early as the year 1480; for we are told that in that year a German, named Bernhard, invented the Pedal; from whence it should seem that he had entertained conceptions of a fuller harmony than could be produced from that instrument by the touch of the fingers alone. This fact seems to agree but ill with Morley's opinion, that before the time of Franchinus there was no such

thing as music in parts; but, notwithstanding this conjecture of his, the evidence that music in consonance, of some kind or other, was known at least as far back, in point of time, as the invention of the organ, is too strong to be resisted; and indeed the form and mechanism of the instrument do little less than demonstrate it. How and in what manner the organ was used in the accompaniment of divine service it is very difficult to say; some intimations of its general use are nevertheless contained in the *Micrologus* of Guido, and these lead to an opinion that although the singing of the church offices was unisonous, allowing for the difference between the voices of the boys and men employed therein, yet that the accompaniment thereof might be symphonic, and contain in it those consonances which no musician could possibly be ignorant of in theory, and which in practice it must have been impossible to avoid.

Of Franchinus, of whom such frequent mention has been made in the course of this work, of his labours to cultivate the science of harmony, and of the several valuable treatises by him compiled from the writings of the ancient Greeks, then lately introduced into Italy, the following is an account, extracted immediately from his own works, and those of contemporary authors.

FRANCHINUS GAFFURIUS, surnamed *Laudensis*, from Lodi, a town in the Milanese, where he was born, was a professor of, and a very learned and elaborate writer on music, of the fifteenth century. He was born on the fourteenth day of January, in the year 1451, and was the son of one Betino, of the town of Bergamo, a soldier by profession, and Catherina Fixaraga his wife. We are told that while he was yet a boy he was initiated into the service of the church; from whence perhaps nothing more is to be inferred than that he assisted in the choral service. His youth was spent in a close application to learning; and upon his attainment of the sacerdotal dignity, he addicted himself with the greatest assiduity to the study of music. His first tutor was Johannes Godendach, a Carmelite; having acquired under him a knowledge of the rudiments of the science, he left the place of his nativity, and went to his father then at Mantua, and in the service of the marquis Ludovico Gonzaga. Here for two years he closely applied himself day and night to study, during which time he composed many tracts on the theory and practice of music. From Mantua he moved to Verona, and commenced professor of music: there, though he taught publicly for a number of years, he found leisure and opportunity for the making large collections relative to that science, and composed a work intitled *Musicæ Institutionis Collocationes*, which does not appear to have ever been printed, unless, as is hereafter suggested, it might be published under a different title. The great reputation he had acquired at Verona procured him an invitation from Prospero Adorni to settle at Genoa: his stay there was but short, for about a year after his removal thither, his patron being expelled by Baptista Campofragoso and Giovanni Galeazzo, dukes of Milan,

* Bourdelot relates that the intercourse between the French and Italians during the reigns of Charles VIII., Lewis XII., and Francis I., and afterwards in the time of Queen Catherine de Medici, who was in every respect an Italian, contributed greatly to refine the French music; and brought it to a near resemblance with that of Italy; but that many of the churches in France had gone so far as to constitute bands of musicians to add to the solemnity, but that after some years they were dismissed. The chapter of Paris entertained a dislike of them; and by certain capitulary resolutions made in the year 1646, ordained that the *Fauxbourdon* should be revived; and of this kind of harmony, simple and limited as it is, the French are even at this day remarkably fond.

he fixed his residence at Naples; in that city he found many musicians who were held in great estimation, namely, *Johannis Tinctor*, *Gulielmus Garnerius*, *Bernardus Hycart*, and others, and by the advice of his friend and townsman *Philipinus Bononius*, who then held a considerable employment in that city, *Franchinus* maintained a public disputation against them. Here he is said to have written his *Theoricum Opus Musicæ Discipline*, a most ingenious work; but the pestilence breaking out in the city, which, to complete its calamity, was engaged in a bloody war with the Turks, who had ravaged the country of Apulia, and taken the city of Otranto; he returned to Lodi, and took up his abode at Monticello, in the territory of Cremona, being invited to settle there by *Carolo Pallavicini*, the bishop of that city. During his stay there, which was three years, he taught music to the youth of the place, and began his *Practica Musicæ utriusque Cantus*, which was printed first at Milan, in 1496, again at Brescia in 1497, and last at Venice in 1512. Being prevailed on by the entreaties of the inhabitants of Bergamo, and the offer of a large stipend, he removed thither; but a war breaking out between them and the duke of Milan, he was necessitated to return home. There he stayed not long, for *Romanus Barnus*, a canon of Lodi, a man of great power, as he exercised the pastoral authority in the absence of the archbishop of Milan, incited by the fame of his learning and abilities as a public instructor, in the year 1484 invited him to settle there; and such are we told was the high esteem in which he was held by the greatest men there, that by the free consent of the chief of the palace, and without any rival, he was placed at the head of the choir of the cathedral church of Milan. How much he improved music there by study and by his lectures, the number of his disciples, and the suffrage of the citizens are said to have afforded an ample testimony: besides the two works above-mentioned, he wrote also a treatise entitled *Angelicum ac divinum Opus Musicæ Franchini Gafurii Laudensis Regii Musici, Ecclesiæque Mediolanensis Phonsaci: Materna Lingua scriptum*. From several circumstances attending its publication, particularly that of its being written in the Italian language, there is great reason to believe that this is no other than the *Musicæ Institutionis Collocutiones*, mentioned above; and that it contains in substance the lectures which he read to his scholars in the course of his employment as public professor. Last of all, and in the forty-ninth year of his age, he wrote a treatise *De Harmonia Musicorum Instrumentorum*, at the end whereof is an eulogium on *Franchinus* and his writings by *Pantaleone Meleguli* of Lodi, from which this account is for the most part taken. Besides the pains he took in composing the works above-mentioned, not being acquainted, as we may imagine, with the Greek language, he at a great expense procured to be translated into Latin the harmonical treatises of many of the more ancient writers, namely, *Aristides Quintilianus*, *Manuel Bryennius*, *Ptolemy*, and *Bacchius Senior*. The author above-cited, who seems to have been well acquainted

with him, and to manifest an excusable partiality for his memory, has borne a very honourable testimony to his character; for, besides applauding him for the services he had done the science of music by his great learning and indefatigable industry, he is very explicit in declaring him to have been a virtuous and good man. The time of his death is no where precisely ascertained; but in his latter years he became engaged in a controversy with *Giovanni Spataro*, professor of music at Bologna; and it appears that the apology of *Franchinus* against this his adversary was written and published in the year 1520, so that he must have lived at least to the age of seventy.

After having said thus much, it may not be amiss to give a more particular account of the writings of so considerable a man as *Gaffurius*; and first of the *Theorica*: it is dedicated to the famous *Ludovico Sforza*, governor of Milan, the same probably with him of that name mentioned by *Philip de Comines*; it is divided into five books, and was printed first at Naples in 1480, and again at Milan, in 1492.

It is very clear that the doctrines taught in this work, the *Theorica Musicæ* of *Franchinus*, are the same with those delivered by *Boetius*. Indeed the greater part appears to be an abridgement of *Boetius de Musica*, with an addition of *Guido's* method of solmisation; for which reason, and because copious extracts from this latter work have been already given, and *Guido's* invention has been explained in his own words, it is thought unnecessary to be more particular in the present account of it.

The treatise entitled *Practica Musicæ utriusque Cantus*, so called because the purpose of it is to declare the nature of both the plain and mensurable cantus, is of a kind as different from the former as its title imports it to be. For, without entering at all into the theory of the science, the author with great perspicuity teaches the elements of music, and the practice of singing, agreeable to the method invented by *Guido*, the rules of the *Cantus Mensurabilis*, the nature of counterpoint, and, lastly, the proportions as they refer to mensurable music; and this in a manner that shews him to have been a thorough master of his subject. But perhaps there is no part of the *Practica Musicæ* more curious than that formula of the Ecclesiastical Tones contained in the first book of it, and which is inserted in the former part of this work.*

In the first chapter of the second book of this work of *Franchinus*, the author treats of the several kinds of metre in the words following:—

‘The poets and musicians in times past, maturely

* The extract above referred to contains perhaps the most ancient and authentic formula of the tones extant, and must therefore be deemed a great curiosity. *Rousseau* says of plain-chant in general, that it is a precious relique of antiquity: this might be said supposing the tones to be no older than the time of *St. Ambrose*; but it is certain that if they are not the modes of the ancient Greeks, and consequently more ancient by a thousand years, they resemble them so nearly, that they may well be taken for the same, and therefore are an object of still greater veneration. With respect to their use at present, it is true that they make no part of divine service in the churches of the Reformed, but in that of Rome they are still preserved, and are daily to be heard in England in the chapels of the ambassadors from Roman Catholic princes. From all which considerations it cannot but be wished that the integrity of them may be preserved; and to this end nothing can be more conducive than an authentic designation of them severally, and such that heretofore given is supposed to be.

considering the time of every word, placed a long or a short mark over each, whereby each syllable was denoted to be either long or short; wherefore over a short syllable they affixed a measure of one time, and over a long one the quantity of two times; whence it is clear that the short syllable was found out before the long, as Diomedes the grammarian testifies, for one was prior to two. They account a syllable to be short, either in its own nature, or in respect to its position; they also make some syllables to be common; as when they are naturally short and a liquid follows a mute, as in "tenebræ patris." This appears as well among the Greek as the Latin poets; and these syllables are indifferently measured, that is to say, they are sometimes short, and at other times long; and thus they constructed every kind of verse by a mixture of different feet, and these feet were made up of different times; for the Dactyl, that I may mention the quantities of some of them, contained three syllables, the first whereof was long, and the other two short, as "armiger, principis;" it therefore consisted of four times. The Spondee has also four times, but disposed into two long syllables, as "fælix, æstas." The Iambus, called the quick foot, has three times, drawn out on two syllables, the one long and the other short, as Musa. The Anapestus, by the Greeks called also Antidactylus, because it is the reverse of the Dactyl, consists of three syllables, the two first whereof are short, and the last long, as "pietas, erato." The Pyrrichius of two short syllables, as "Miser, pater." The Tribrachus contains three short syllables, as "Dominus." The Amphibrachus has also three, the first short, the second long, and the third short, as "Carina." The Creticus, or Amphiacrus, consists likewise of three syllables; the first long, the second short, and the third long, as "insulæ." The Bacchius also has three syllables, the first short, and the other two long, as "Achates et Ulixes." The Proceleumaticus, agreeing chiefly with Lyric verse, has four short syllables, as "avicula." The Dispondeus was composed of eight times and four long syllables, as "Oratores." The Coriambus consisted also of four syllables, the first long, the two following short, and the last long, as "armipotens." The Biambus had four syllables, the first short, the second long, the third short, and the fourth long, as "Propinquitas." The Epitritus, or Hippius, as it is called by Diomedes, was fourfold; the first kind consisted of four syllables, the first whereof was short, the other three long; and it comprehended seven times, as "sacerdotes." The second Epitritus had four syllables, the second whereof was short, and all the rest long, as "conditores." The third Epitritus contained four syllables, the third whereof was short and all the rest long, as "Demosthenes." The fourth Epitritus was formed also of four syllables, the last whereof was short, and the three first long, as "Fesceninus." Some of these are supposed to be simple, as the Spondeeus and Iambus, and others compound, as the Dispondeus and Biambus. Diomedes and Aristides, in the first book, and St.




Augustine, have explained them all. Musicians have invented certain characters with fit and proper names, by means whereof, the diversity of measured times being previously understood, they are able to form any Cantus, in the same manner as verse is made from different feet. Philosophers think that the measure of short time ought to be adjusted by the equable motions of the pulse, comparing the Arsis and Thesis with the Diastole and Stole. In the measure of every pulse the Diastole signifies dilatation, and the Stole contraction.







The poets have an Arsis and Thesis, that is an elevation and deposition of their feet according to the passions; and they use these in reciting, that the verse may strike the ear and soften the mind. The connexion of the words is regulated according to the nature of the verse; so that the very texture of the verse will introduce such numbers as are proper to it. Rythmus, in the opinion of Quintilian, consists in the measures of times; and I conceive time to be the measure of syllables. But Bede, in his treatise concerning figures and metres, has interpreted Rythmus to be a modulated composition, not formed in any metrical ratio but to be determined by the ear, in the same manner as we judge of the verses of the common poets. Yet we sometimes meet with Rythmi not regulated by any art, but proceeding from the sound or modulation itself; these the common poets form naturally, whereas the Rythmi of the learned are constructed by the rules of art. The Greeks assert that Rythmus consists in the Arsis and Thesis, and that sort of time which some call vacant or free. Aristoxenus says it is time divided numerically; and, according to Nicomachus, it is a regulated composition of times; but it is not our business to prescribe rules and canons, for we leave to the poets that which properly belongs to them; yet it were to be wished that they who make verses had good ears, whereby they might attain a metrical elegance in poetry.

CHAP. LXIII.

In the second chapter Franchinus treats of the characters used to denote the different measures of time in the words following:—





The measure of time is the disposition of the quantity of each character. Every commensurable description is denoted either by characters or pauses; the Greeks in their Rythmus used the following, viz., for the breve —, for the long of two times \simeq , for that of three times \vee , for that of four times \mathbb{W} , for that of five times \mathbb{V} . To express the Arsis they added a point to each character, thus $\simeq^.$, $\vee^.$. The Thesis was understood by the simple character, without any such addition. As to the consonant intentions, such as the diatessaronic, diapentic, diapasonic, and the rest, they were expressed by certain characters, which I purposely omit, as being foreign to the present practice.



'The musicians of this day express the measure of one time by a square filled up ; that of two, called a long, by a square with a stroke on the right side, either ascending or descending, which stroke was four times as long as one side of the square. Some however, because of the deformity arising from the too great length of the stroke, made it equal in length to only three times the side of the square, and others made it but twice, thus . The long of three times was expressed also by a square and a stroke, but with this diversity, one third of its body was white or open, thus 

or thus . The long of four times was signified by a full quadrangle with a stroke, the body whereof was double in length to its height ; and this was called a double long. The triple long had a square of triple extension , and contained six times. There were also characters that comprehended in them several longs, each of which was distinguished by a single stroke thus . Those that came afterwards, subverting the order of these characters, described the marks open, having many short squares in one body, thus . They also marked the long conjoined with the breve, and the breve with the long, in one and the same figure thus . But as these latter characters are now disused, we will leave them, and speak concerning those by which the fashion and practice of those latter days may be known to one.'


The third chapter treats of what the author calls the five essential characters, in the following words:—

'A character is a mark used to signify either the continuance or the privation of sound; for taciturnity may as well be the subject of measure as sound itself. The measures of taciturnity are called pauses, and of these some are short and others long.

'Musicians have ascribed to the breve the character of a square , which they call also a time, as it expresses the measure of one time. The long they signified by a square, having on the right side a stroke either upwards or downwards, in length equal to four times the side of the square, thus ; it was called also the double breve; but the writers of music for the most part make this stroke without regard to any proportion. Again they divided the square of the breves diagonally into two equal parts, in this manner , and joined to it another triangle, they turned the angles upwards and downwards thus  and called the character thus formed a semi-breve, and gave to it half the quantity of the breve.* Lastly, those of latter days gave the measure of one time to a semibreve, comprehending in it the Diastole and the Systole;† and as the Diastole and

'Systole, or Arsis and Thesis, which are the least measure of the pulse, are considered as the measure of one time, so also is the semibreve, which, in respect of its measure, coincides exactly with the measure of the pulse; and as they considered the measure of the Diastole or Systole, or of the Arsis or Thesis as the measure of the shortest duration in metrical sound, they gave to the character which denoted it, the name of Minim, and described it by a semibreve, with a stroke proceeding either upwards or downwards from one of its angles thus  or thus .

'The short character, consisting of one time, and the long of two times, are termed the elementary characters of measurable sound, and their quantities answer to the just and concinnous intervals, or rather the integral parts of a tone; for according to Aristides and Anselm, the tone is capable of a division into four of these diesis, which are termed enarmonic, and answerable to this division the long is divided into four semibreves, and the breve into four minims, as if one proceeded from each angle of the breve: therefore as everything arises or is produced from the Minimum, or least of his own kind; and number, for instance, takes its increase from unity, as being the least, and to which all number is ultimately resolvable; and as every line is generated and increased by, and again reduced to a point; so every measure of musical time is produced from, and may again be reduced to a minim, as being the least measure.

'Lastly, musicians have invented another character, the double long, which is used in the tenor part of motetts, and is equal in quantity to four short times or breves. It exceeds the other characters, both in respect of its quantity, and the dimension of its figure, this they call the Maxima or Large, and describe it thus .

character is aptly enough compared to the chord Proslambanomenos, the most grave of the perfect system; and the rest of the characters may with equal propriety be compared to other chords, as having the same relation to different parts of the system as those bear to each other; and in this method of comparison the minim will be found to correspond with the tone, the semibreve to the diatessaron, and the large to the bisdiapason.'

In the fourth chapter Franchinus proceeds to explain the more minute characters in these words:—

'Posterity subdivided the character of the minim, first into two equal parts, containing that measure of time called the greater semiminim, which Prodocimus describes in a twofold way; for taking his

* Franchinus, in his *Angelicum et divinum Opus*, tract III. cap. I. resembles this character to a grain of barley. And here it may be noted that his account of the invention of the characters used in mensurable music is much more probable than that of Vicentino, pag. 219, of this work, which though ingenious is fanciful.

† This observation of Franchinus is worthy of remembrance, for not-

withstanding what he says a few lines above, and the remark of Listenius in the note pag. 223, of this work, we are here taught to consider the semibreve, or tactus minor, as the measure of a time, or as we should now say, of a bar, consisting of two pulses or strokes, the one down, the other up. The use of the observation is this, fugues written in canon have always a direction to shew at what distance of time the replicate is to follow the guide or principal, such as fuga in Hypodiapente post tempus. Butl. Princ. of Mus. 76, fuga in unisono post duo tempora, ib. 77, et vide Zarl. Istit. Harm. Parte III. cap. lv. now unless the value of a time be previously ascertained, a canon is no rule for the singing of a fugue: and that the practice corresponds with the observation of Franchinus here remarked on, may be seen in sundry examples to the purpose, in the *Prattica di Musica* of Lodovico Zaccane, libro II. fol. 112.

'notion of a minim from Tinctor, he first describes 'the semi-minim by the figure of a minim having the 'end of its stem turned off to the right, with a kind 'of crooked tail, thus δ ; and the lesser semiminim, in

'quantity half the greater, with two such turns, thus δ . 'Secondly, keeping precisely to the form of the minim, 'he makes the body full black, thus \downarrow , and divides 'this last character into two equal parts, by giving 'to it the same turn of the stem as before had been 'given to the minim, thus \downarrow , and this they called the 'lesser semiminim. The former characters, viz., those 'with the open or white body, are called by Pros- 'docimus, the minims of Tinctor, drawn into duple 'or quadruple proportion; but others, whose ex- 'ample we choose rather to follow, call these charac- 'ters of subdivision with a single turn of the stem, 'seminims, as being a kind of disjunct or separated 'minims; and again they call the parts of these 'seminims, from the smallness of their measure 'and quantity, semiminimims; so that the semiminim 'follows the minim as a greater semitone does a 'tone, and the semiminimim looks back upon the 'minim as a lesser semitone does on the tone.

'There is yet a third, the most diminished particle 'of a minim, and which the same Prosdocimus would 'have to be called the minim of Tinctor in an octuple 'proportion; others the lesser semiminim; and others 'a comma, which we think would more properly be 'called a diesis, the name given to the least harmo- 'nical particle in the division of a tone: this many 'describe by a full semiminim, having a crooked tail 'turned towards the right, and a crooked stroke pro- 'ceeding from its angle underneath, in this manner δ ;

'but as the appearance of this character among the 'other diminutions is very deformed, we have ex- 'pressed it by a crooked stem drawn from its summit, 'and turned towards the left in this manner \downarrow , to 'denote its inferiority in respect of that character 'which it resembles, and which is turned to the right. 'There are some who describe the measures of time 'by characters variously different from those above 'enumerated, as Franco, Philippus de Caserta, Johan- 'nes de Muris, and Anselmus of Parma, which last 'draws a long Plica, or winding stroke ascending, 'and also a short one, both having tails on either side. 'Again, the same Anselmus makes a greater, a lesser, 'and a mean breve; the greater he has expressed by 'a square, with a stroke descending on the left side, 'in this manner \sqcap ; the lesser by a square with a

'stroke ascending from the left side thus \sqcup ; and 'the mean by a square without any stroke, thus \square . 'Likewise the greater semibreve he describes with 'two strokes, the one ascending and the other descend- 'ing, both on the right side, thus \parallel ; the lesser 'semibreve by a square with two strokes on the left 'side, thus \sqcap , and the mean semibreve by a square 'with a stroke drawn through it both upwards and 'downwards in this manner \equiv and by a like 'method he signifies the rest of the measures; but

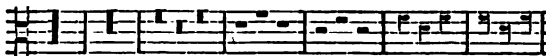
'these latter characters later musicians have chose 'rather to reject than approve.'

The fifth chapter of the same book contains an explanation of the ligatures, of which enough has been said in the foregoing part of this work.

In the sixth chapter, De Pausis, Franchinus thus explains the characters by which the rests are de- scribed:—

'A pause is a character used to denote a stop made 'in singing according to the rules of art. The pause 'was invented to give a necessary relief to the voice, 'and a sweetness to the melody; for as a preacher 'of the divine word, or an orator in his discourse 'finds it necessary oftentimes to relieve his auditors 'by the recital of some pleasantry, thereby to make 'them more favourable and attentive, so a singer 'intermixing certain pauses with his notes, engages 'the attention of his hearers to the remaining parts 'of his song. The character of a pause is a certain 'line or stroke drawn through a space or spaces, or 'part of a space, not added to any note, but entirely 'separated from every other character. The ancients 'had four pauses in their songs, which, because they 'were the measures of omitted notes, assumed the 'respective names of those notes, as the pause of a 'Minim, of a Semibreve, of a Breve, and of a Long. 'The breve pause is a stroke comprehending two 'such intervals; the pause of three times, whose ex- 'tremities include four lines, occupies three entire 'spaces; this they call a perfect long, because it passes 'over in silence three equal proper times, which are 'called Breves, for in the quantities of characters of 'this kind the ternary number is esteemed perfect.'

The characters of the several pauses of a perfect long, an imperfect long, a breve, semibreve, minim, semiminim or crotchet, and semiminimim or quaver, are thus described by Franchinus, and are in truth the same with those now in use.



Long perfect Long imperfect Breve Semibreve Minim Semi-minim Semi-minimim

By the first of which characters is to be understood a measure of quantity different in its nature from the second; for it is to be observed that in the writings of all who have treated on the Cantus Mensurabilis, the attribute of Perfection is ascribed to those numbers only which are called Ternary, as including a progression by three; the reasons for which, whether good or bad it matters not, are as follow:—

'The Ternary number in the quantities of this 'kind is esteemed perfect, first, because the Binary 'number is ever accounted feminine, whereas this, 'which is the first uneven number, is said to be mas- 'culine; and by the alternate coupling of these two 'the rest of these numbers are produced. Secondly, 'it is composed both of Aliquot and Aliquant parts. 'Thirdly, there is a relation between the numbers '1, 2, 3, as they follow in the natural order, which, as 'St. Augustine testifies, is not to be found between 'any others; for, not to mention that between them 'no number can intervene, 3 is made up of the two 'numbers preceding, which cannot be said of 4 or 5, 'nor of those that follow them. Fourthly, there is a

'threefold equality in the number 3, for its beginning, middle, and end are precisely the same; and by means thereof we discern the Divine Trinity in the supreme God. Lastly, there is a perfection in the number 3, arising from this property, if you multiply 3 by 2, or 2 by 3, the product will be six, which mathematicians pronounce to be a perfect number in respect of its aliquot parts.'

The third book of the treatise *De Practica* contains the elements of counterpoint with the distinctions of the several species, and examples of each in two, three, and four parts. The fourth chapter, entitled 'Quæ et ubi in Contrapuncto admittendæ sint discor-

'dantiae,' though it be a proof that discords were admitted into musical composition so early as the author's time, shews yet that they were taken very cautiously, that is to say, they never exceeded the length of a semibreve; and this restriction, for which he cites Dunstable, and other writers, may well be acquiesced in, seeing that the art of preparing and resolving discords seems to have been unknown at this time.

In chap. XI. *De Compositione diversarum Partium Contrapuncti*, are several examples in four parts, viz., Cantus, Contra-tenor, Tenor, and Baritonans, one whereof is as follows:—*



Upon these examples it is observable that the musical characters from their dissimilarity seem not to have been printed upon letter-press types, but on wooden blocks, in which the lines, cliffs, and notes had been first cut or engraved.

The fourth book is altogether on the subject of the proportions, not as they refer to consonance, but as they relate to mensurable music; and though the various species of proportion have already been explained, it seems necessary here to recapitulate what has been said on that head, in order to give an idea of the general view and design of the author in this last book of his treatise *De Practica*.

Proportion is the ratio that two terms bear to each other, as two numbers, two lines, two sounds, &c.; as if we were to compare *ut* below with *sol* above, or any other two sounds at different parts of the scale. In general there are two kinds of proportion.

The first is of Equality, and is when two terms are equal, the one containing neither more or less than

* In the composition of music in symphony, it is to be noted that the number of parts can never in strictness exceed four; and that where any composition is said to be of more, some of the parts must necessarily pause while others sing.

The most usual names for the several parts of a vocal composition are *base*, *tenor*, *counter-tenor*, and *cantus*; where it is for five voices, another part called the *medius* or *mean* is interposed between the counter-tenor and the *cantus*. In three parts, where there is no *cantus*, the upper part is generally the counter-tenor, which in that case assumes the name of *Altus*; but these which are the general rules observed in the arrangement of parts allow of many variations. Franchinus, in the example above-cited, has given the name of *Baritonans* to one of the parts; this is a term signifying that kind of base, which for the extent of its compass may be considered as partaking of the nature both of the base and tenor. In compositions for instruments, and sometimes in those for voices, the *cantus* is called the *Treble*, which several terms are thus explained by Butler in his *Principles of Music*, lib. I. chap. iii. in not.

The *Base* is so called because it is the basis or foundation of the song.

The *Tenor*, from *teneo* to hold, consisted anciently of long holding notes, containing the ditty or plain-song, upon which the other parts were wont to descant in sundry sorts of figures.

The *Counter-tenor* is so named, as answering the tenor, though commonly in higher notes; or it may be thus explained, *Counter-tenor quasi Counterfeit-tenor*, from its near affinity to the tenor.

Cantus seems to be an arbitrary term, for which no reason or etymology is assigned by any of the writers on music.

The *Treble* has clearly its name from the third or upper septenary of notes in the scale, which are ever those of the *treble* or *cantus* part.

The term *Baritonans* answers precisely to the French *Contre-basse*, an appellation very proper for a part, which as it is said above, seems to bear the same affinity to the base as the counter-tenor does to the tenor.

the other, as 1 1, 2 2, 8 8; the two sounds in this proportion are said to be unisons, that is having the same degree of gravity and acuteness.

The other is of Inequality, as when of two terms one is larger than the other, *i. e.* contains more parts, as 4, 2; because the first contains the latter once and something left, this therefore must be inequality. Of this proportion there are five species, which the Italians call *Generi*.

First, *Multiplice* or *Multiple* is when the larger number contains the small one twice, as 4, 2. If this greater term do contain the less but twice, as 4, 2; 6, 3; 16, 8; &c. it is called *Proporzione Dupla*, if three times *Tripla*, if four *Quadrupla*, and so on to infinity.

The second proportion of inequality is *Proporzione del Genere superparticulare*, and is that wherein the greater term contains the less once, and an aliquot or exact part of the lesser remains, as 3, 2; if the number remaining be exactly half the less number, the proportion is called *Sesquialteral*; if a third part of the less as 4, 3, *Sesquiterza*, and so on, adding to *Sesqui* the ordinal number of the less term.

The third proportion of inequality is called *Proporzione del Genere superparziente*, in which the greater term contains the less once, and two, three, four, or more parts of the less remaining; or as *Zarlino* says, 2, 3, 4, or more units, &c. This proportion is distinguished by the words *Bi*, *Tri*, *Quadri*, &c. between *Super* and *Parziente*; thus the proportion of 5, 3, is called *Superbiparziante Terza*, because 5 contains 3 once and two units remain, which are two parts of 3; that of 7, 4, *Supertriparziante Quarta*, by reason 7 contains 4 once, and three parts of 4 remain, and so of others.

The fourth and fifth kinds of proportion of inequality are compounded of the multiple and one of those above described. †

Morley, in the following table, has very clearly shewn how the most usual proportions in music are generated:—

† Vide Brossard, *Dictionnaire de Musique*, in art.

C	C	C	C	C	C	C	C	C	C
1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

and has explained its use and reference to the purposes of musical calculation in the following terms:—

‘As for the use of this table, when you would know what proportion any one number hath to another, finde out the two numbers in the table, then looke upwarde to the triangle inclosing those numbers, and in the angle of concurrence, that is where your two lynes meete together, there is the proportion of your two numbers written: as for example, let your two numbers be 18 and 24; looke upward, and in the top of the tryangle covering the two lynes which inclose those numbers, you will find written *Sesquitertia*; so likewise 24 and 42 you finde in the angle of concurrence written *super tripartiens quartas*, and so of others.’

There is reason to think that this ingenious and most useful diagram was the invention of Morley himself; since neither in Franchinus, Peter Aron,

Glareanus, Zarlino, nor many other ancient writers, who have been consulted for the purpose, is it to be found. Indeed in the *Theorica* of Franchinus we meet with that deduction of numbers which forms the basis of the triangle, and nothing more, but that work Morley declares he had never seen: * it is

* For this we have his own word in a passage which proves, though he takes frequent occasion to cite Franchinus, yet that he had the misfortune to be a stranger to the most valuable of his works, as also to some particulars relating to ancient music, which he would have been glad to have known. These are Morley's own words: ‘And though Friar Zaccane out of Franchinus affirms that the Greekes didde sing by certaine letters signifying both the time that the note is to be holden in length, and also the heighth and lownesse of the same: yet because I find no such matter in Franchinus his *Harmonia Instrumentorum* (for his *Theorica* nor *Practica* I have not seene, nor understand not his arguments) I knowe not what to saie to it.’ [Annotations on the first part of the Introduction to Practical Music.]

The passage above alluded to by Morley is to be found in the *Practica di Musica* of Zaccani, lib. I. cap. 15, but it contains no reference to any particular work of Franchinus, nevertheless it is clear that he must have had his eye on the second chapter of the second book of the *Practica Musicae utriusque Catus*, in which are exhibited the characters used to denote the measures or times which constituted the rhythmus of the

highly probable however that he found these numbers in some other old author; and as to the several triangles produced therefrom, he may well be supposed to have taken the hint of drawing them from that diagram in the manuscript of Waltham Holy Cross, inserted in page 248 of this work, in which a series of duple, triple, sesquialteral, and sesquitercian proportions is deduced from certain numbers there assumed.

CHAP. LXIV.

THE use of the several proportions contained in the foregoing diagram, so far as they regard music, was originally to ascertain the ratios of the consonances, and for that purpose they are applied by Euclid in the *Sectio Canonis*; for instance, the diapason is by him demonstrated to be in duple, which is a species of Multiplex proportion; the diatessaron in superparticular, that is to say Sesquitercia proportion, 4 to 3; the diapente also in superparticular, that is to say Sesquialtera proportion, 3 to 2; and lastly, the Diezeugtic tone also in superparticular, that is to say Sesquioctave proportion, 9 to 8. All which proportions were investigated by the division of the monochord, and are now farther demonstrable by the vibrations of pendulums of proportionable lengths.

That the *Cantus Mensurabilis* had also a foundation in numerical proportion is evident, for not only it consisted in a combination of long and short quantities, but each had a numerical ratio to the other; for instance, to the Large the Long was in duple, and the Breve in quadruple proportion; this was in the imperfect mode, but in the perfect, where the division was by three, the Long was to the Large in triple, and the Breve in nonuple proportion.

There does not seem to have been any original necessity for transferring the ratios from consonance to measures, or at least of retaining more than the duple and triple proportions, with those others generated by them, since we have found by experience that all mensurable music is resolvable into either the one or the other of these two; but no sooner were they adjusted, and a due discrimination made between the attributes of perfection and imperfection as they related to time, then the writers on mensurable music set themselves to find out all the varieties of proportion which the radical numbers are capable of producing. How these proportions could possibly be applied to practice, or what advantage music could derive from them, supposing them practicable, is one of the hardest things to be conceived of in the whole science. Morley, in the first part of his *Introduction*, pag. 27, has undertaken to declare the use of the most simple of them, namely the Duple, Triple, Quadruple, Sesquialtera, and Sesquitercia, which he thus explains in the following dialogue:—

Greeks. See them in pag. 279, of this work. But Zaccone seems to be mistaken in supposing that these characters signified as well the melodical distances as the quantity of the notes, for Franchinus intimates nothing like it, on the contrary he says expressly, that these latter were denoted by certain characters, which he purposely omits; and what these characters were may be seen in Boetius de Musica, lib. IV. cap. iii. and in book I. chap. iv. of this work.

‘PHILOMATHES. What is proportion?

‘MASTER. It is the comparing of numbers placed ‘perpendicularly one over an other.

‘PHI. This I knewe before; but what is that to ‘musicke?

‘MA. Indeeede wee do not in musicke consider ‘the numbers by themselves; but set them for a sign ‘to signifie the altering of our notes in the time.

‘PHI. Procede then to the declaration of proportion.

‘MA. Proportion is either of equality or unequality. Proportion of equalitie is the comparing of two equal quantities together, in which because ‘there is no difference, we will speak no more at this ‘time. Proportion of inequality is when two things ‘of unequal quantitie are compared together, and is ‘either of them more or less inæqualitie. Proportion ‘of the more inequality is when a greater number is ‘set over and compared to a lesser, and in musicke ‘doth always signifie diminution. Proportion of the ‘lesse inequality is where a lesser number is set ‘over and compared to a greater, as $\frac{3}{2}$, and in ‘musicke doth alwaies signifie augmentation.

‘PHI. How many kinds of proportions do you ‘commonly use in musicke, for I am persuaded it is ‘a matter impossible to sing them all, especially those ‘which be termed superparcients?

‘MA. You saie true, although there be no proportion so harde but might be made in musicke; ‘but the hardenesse of singing them hath caused ‘them to be left out, and therefore there be but five ‘in most common use with us, Dupla, Tripla, Quadrupla, Sesquialtera, and Sesquitercia.

‘PHI. What is Dupla proportion in musicke?

‘MA. It is that which taketh halfe the value of ‘every note and rest from it, so that two notes of one ‘kinde doe but answer to the value of one; and it ‘is knowen when the upper number containeth the ‘lower twise, thus $\frac{2}{1}$, $\frac{4}{2}$, $\frac{8}{4}$, $\frac{16}{8}$, &c. * * *

‘PHI. What is Tripla proportion in musicke?

‘MA. It is that which diminisheth the value of ‘the notes to one third part; for three briefes are set ‘for one, and three semibreves for one, and is knowen ‘when two numbers are set before the song, whereof ‘the one containeth the other thrise, thus $\frac{3}{1}$, $\frac{6}{2}$, $\frac{9}{3}$, &c.

‘PHI. Proceed now to quadrupla.

‘MA. Quadrupla is proportion diminishing the ‘value of the notes to the quarter of that which they ‘were before; and it is perceived in singing when ‘a number is set before the song, comprehending ‘another four times, as $\frac{4}{1}$, $\frac{8}{2}$, $\frac{16}{4}$, &c. * * * Quintupla ‘and Sextupla I have not seen used by any strangers ‘in their songs so far as I remember, but here we use ‘them, but not as they use their other proportions, ‘for we call that Sextupla where wee make sixe black ‘minyms to the semibreve, and Quintupla when we ‘have but five, &c., but that is more by custom than ‘by reason. * * *

‘PHI. Come then to Sesquialtera: what is it?

‘MA. It is when three notes are sung to two of ‘the same kinde, and is knowne by a number containing another once and his halfe, $\frac{3}{2}$, $\frac{4}{3}$, &c. * * * ‘Sesquitercia is when four notes are sung to three of

'the same kinde, and is known by a number set before him, contayning another once and his third part, thus, $\frac{3}{2}$, $\frac{4}{3}$, $\frac{5}{4}$. And these shall suffice at this time, for knowing these, the rest are easily learned. But if a man would ingulphe himselfe to learne to sing, and set down all them which Franchinis Gaufurius hath set downe in his booke De Proportionibus Musicis, he should find it a matter not only hard but almost impossible.'

It is evident from the passages above-cited, that whatever might have been the number of the proportions formerly in use, they were in Morley's time reduced to five, and that he himself doubted whether many of those contained in the *Practica Musicae* utriusque Cantus of Franchinus, could possibly be sung; and farther there is great reason to think that in this opinion he was not singular.

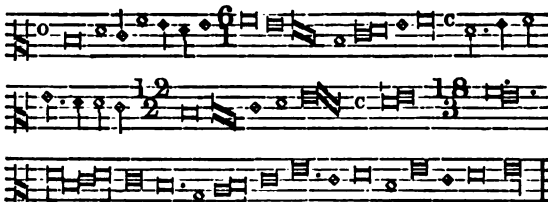
To give a short account of the contents of Franchinus's fourth book, it contains fifteen chapters, entitled as follow:—

De diffinitione et distinctione proportionis,	Caput primum.
De quinque generibus proportionum majoris et minoris inequalitatis,	Caput secundum.
De genere multiplici eiusque speciebus,	Caput tertium.
De genere submultiplici eiusque speciebus,	Caput quartum.
De genere superparticulari eiusque speciebus,	Caput quintum.
De genere subsuperparticulari eiusque speciebus,	Caput sextum.
De genere superpartiente eiusque speciebus,	Caput septimum.
De genere subsuperpartiente eiusque speciebus,	Caput octavum.
De genere multiplici superparticulari eiusque speciebus,	Caput nonum.
De genere submultiplici superparticulari eiusque speciebus,	Caput decimum.
De genere multiplici superpartiente eiusque speciebus,	Caput undecimum.
De genere submultiplici superpartiente eiusque speciebus,	Caput duodecimum.
De coniunctione plurium dissimulorum proportionum,	Caput tertium decimum.
De proportionibus musicis consonantias nutrientibus,	Caput quartum decimum.
De productione multiplicium proportionum ex multiplicibus superparticularibus,	Caput quintum decimum.

The first chapter of this book treats of proportion in general, with the division thereof into discrete and continuous, rational and irrational. In this discrimination of its several kinds, Franchinus professes to follow Euclid, and other of the ancient writers on the subject; referring also to a writer on proportion, but little known, named Johannes Marlianus. In the subsequent chapters are contained a great variety of short musical compositions calculated to illustrate the several proportions treated of in each: some in two parts, viz., tenor and cantus; others in three, viz., tenor, contratenor and cantus. The duples, triples, and quadruples may in general be conceived of from what Morley has said concerning them; and so might the others, if this explanation, which, mutatis mutandis, runs through them all, were at this day intelligible, namely, that a certain number of the latter notes in each, are equivalent in quantity and measure of time to a less number of precedent ones, apparently of an equal value. To give an instance in sextuple proportion, these are the author's words:

'Sextupla proportio quinta multiplicis generis species fit quum maior sequentiam notularum numeros ad minorem præcedentium relatus: eum in se comprehendit sexies præciæ: et æquivalet ei in quantitate et temporis mensura ut vi. ad. i. et xii. ad. ii. et xviii. ad. iii. sex enim notulæ secundum hanc dispositionem uni sibi consimili æquivalent et coquantur: ita ut singulæ quæque ipsarum sex diminuantur de quinque sextis partibus sui quantitativi valoris: describitur enim in notulis hoc modo $\frac{6}{4}$ $\frac{3}{2}$ $\frac{2}{1}$ quod hoc monstratur exemplo:—'

CANTUS.



TENOR.



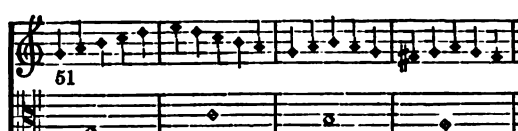
* Pract. Mus. lib. IV. cap. iii.

Franchinus is not sufficiently clear to a modern apprehension with respect to the manner in which the proportions are to be sung; but with the assistance of Morley, and by the help of that rule, which in his Annotations on pag. 31 of the first part of his Introduction he lays down as infallible, namely, that 'in all musical proportions the upper number signifieth the semibreve, and the lower the stroke; or, in other words, because the division may be into less notes than semibreves, and the notes divided may be less in quantity than a stroke or breve; and that other in pag. 28, of the Introduction, to wit, 'that the upper number signifieth the progression, and the under the measure,' it is discoverable that in duple proportion two notes in one part are to be sung to one in the other, in triple three, in quadruple four, and in quintuple five. Of the two former kinds he has given examples in the twenty-eighth and subsequent pages of his Introduction; and of the two latter the following occur, pag. 91 of the same work:—

QUADRUPLA.



QUINTUPLA.



As to that other work of Franchinus, entitled *Angelicum ac divinum Opus musicae*, the epithets



Sesquialtera and *Sesquitercia* are thus represented by him:—

SESQUIALTERA.



given to it might induce a suspicion that it was a posthumous publication by some friend of the



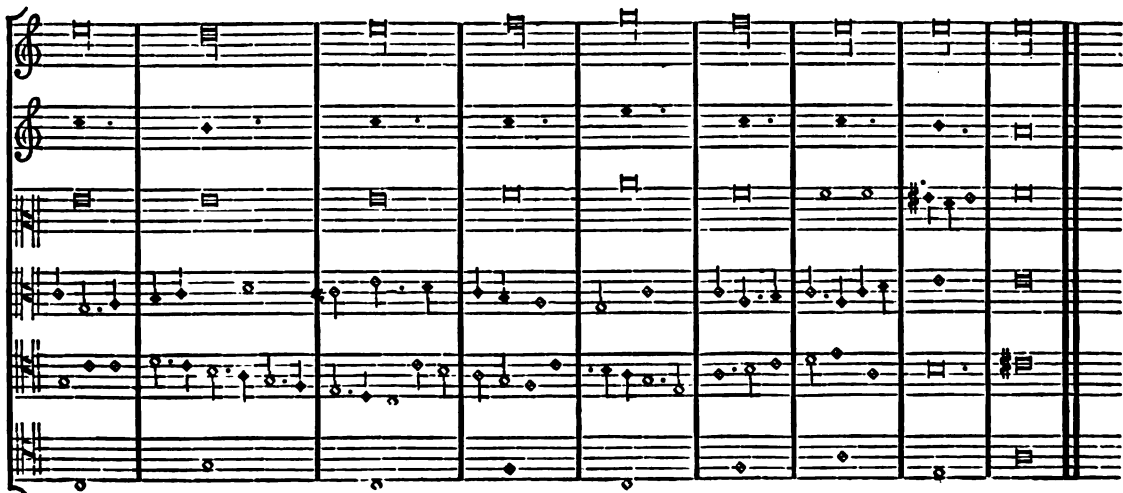
SESQUITERCIA.



Upon the former whereof he remarks as follows:—

‘Here they set downe certain observations, which they termed Inductions as here you see in the first two barres *sesquialtera* perfect: that they called the Induction to nine to two, which is quadruple *sesquialtera*. In the third barre you have broken *sesquialtera*, and the rest to the end is quadruple *sesquialtera*, or, as they termed it, nine to two; and every proportion whole is called the Induction to that which it maketh, being broken. As tripla being broken in the more prolation will make nonupla, and so is tripla the Induction to nonupla. Or in the less prolation will make sextupla, and so is the Induction to sextupla.’

The general method of reconciling dissimilar proportions, and reducing them to practice, is exhibited by Morley in the following composition of Alessandro Striggio, being the latter part of the thirtieth song of the second book of his madrigals for six voices to the words ‘*Alli acqua sacra*.’ *Introd.* pag. 35:—



author, rather than that he gave it to the world himself; but the dedication of this book to Simone Crotto, a patrician of Milan, excludes the possibility of doubt that it was published by Franchinus, and gives occasion to remark how much the manners of the fifteenth century are exceeded by those of the present time, in which should an author of the first degree of eminence in any faculty or science give to a work of his own the character of Angelic or Divine, he would be more censured for his vanity than admired for his learning or ingenuity.

The difference here noted carries with it no imputation of excessive vanity in Franchinus, as it is in a great measure accounted for by the practice of the age he lived in; but it may serve to shew that the refinements of literature have a necessary effect on the tempers and conduct of men, and that learning and urbanity generally improve together.

To give a particular account of this work would in effect be to recapitulate the substance of what has already been cited from the writings of the ancient harmonicians, more especially Boetius, of whom, as he was a Latin writer, Franchinus has made considerable use, as indeed have all the musical writers;

Upon which Morley makes the following comment: 'Herein you have one poynt handled first in the ordinary moode through all the parts, then in Tripla through all the parts, and lastly, in proportions, no part like unto another, for the treble conteyneth diminution in the Quadruple proportion. The second treble or Sextus hath Tripla prickt all in black notes. Your Altus or meane conteyneth diminution in Dupla proportion. The Tenor goeth through with his Tripla (which was begone before) to the ende. The Quintus is Sequialtera to the breefe, which hath this sign $\text{C} \frac{3}{2}$ set before it. But if the sign were taken away, then woulde three minims make a whole stroke, whereas now three semibreves make but one stroke. The Base is the ordinary moode, wherein is no difficulty.'

It seems not very easy to reconcile proportions so dissimilar as are contained in the examples above given, in respect that the *Aris* and *Thesis* in the several parts do not coincide, unless, which probably was the method of singing them, in the beating one bar was marked by a down, and the other by an up stroke.

But after all it is extremely difficult to account for this capricious interchange of proportions in the same Cantus, or to assign any good reason for retaining them. In the one example produced by Morley, from Alessandro Striggio, and given above, we are more struck with the quaintness of the contrivance, than pleased with the effect. In short, the multiplicity of proportions seems to have been the abuse of music; and this the same author seems to allow in the course of his work, and to censure where he says, that 'being a child he had heard him greatly commended who coulde upon a plaine song sing hard proportions, and that he who could bring in maniest of them was accounted the jolliest fellowe.' *Introd.* pag. 119.

So much for the use of different proportions in different parts. The terms by which they were anciently characterised come next to be considered; and here we shall find that the terms *Multiplex*, *Superparticular*, and *Superpartient*, with their several compounds, are better supplied by those characters called the *Inductions*; for the former do but declare the nature of the proportions, which is a mere speculative consideration, whereas the latter denote the proportions themselves. To conceive justly of these it is necessary to premise that the measure of a modern bar in duple time is a semibreve, and that all the triples have a supposed ratio to this measure. If the progression be by Minims, the radical number is the number of minims contained in the bar of duple time, and the upper the number of progression, as in this instance $\frac{3}{2}$, which denotes that species of triple in which three minims are contained in the bar. If the progression be by Crotchets, the radical gives the number of crotchets in a bar of duple time, and the upper the number of progression, as $\frac{3}{2}$, signifying that three crotchets are contained in a bar. If the progression be by Quavers, eight are contained in a bar of duple time, and $\frac{3}{2}$ is the signature of a movement wherein three quavers make a bar.

The above observations are intended to shew that our want of an accurate knowledge of the ancient proportions of time is a misfortune that may very well be submitted to, since it is but a consequence of improvements that have superseded the necessity of any concern about them; it being incontrovertible that there is not any kind of proportion or measure that the invention can suggest as proper for music, which is not to be expressed by the characters now in use. These, and the division of time by bars, have rendered useless all the learning of the ligatures, all the distinctions of mood, time, and prolation; all the various methods of augmentation and diminution by black full and black void, red full and red void characters, and, in a word, all the doctrine of proportions as applied to time, which Franchinus and numberless authors before him had laboured to teach and establish.

for as to the Greeks, it is well known that till the revival of learning in Europe, their language was understood but by very few: Franchinus himself was unable to read the Greek authors in the original, and for that reason, as has been already mentioned, he procured translations of them to be made at his own expense. There are however many things in this work of Franchinus that deserve to be mentioned.

It was printed at Milan in the year 1508; and from the language, which is the Italian of that day, and the style and manner in which this book is written, there can be no doubt but that it is the same in substance, perhaps nearly so in words, with those lectures which we are told he read at Cremona, Lodi, and elsewhere. Indeed the frontispiece to the book, which represents him in the act of lecturing, seems to indicate no less.

The work, as it now appears, differs in nothing from an institute on the harmonical science: it begins with an explanation of the five kinds of proportion of greater inequality, namely, multiple, superparticular, superpartient, multiple superparticular, and multiple superpartient.

The author then proceeds to declare the nature of the consonances, and exhibits the ancient system, consisting of a double diapason, with his own observations on it. He then endeavours, by the help of Ptolemy and Manuel Bryennius, but chiefly of Boetius, to explain the doctrine of the three genera; in the doing whereof he professes only to give the sentiments of the above, and a few less considerable writers. He also shews the difference between arithmetical, geometrical, and harmonical proportionality.

After declaring the nature of Guido's reformation of the scale, the use of the syllables, the cliffs, and the order in which the mutations arise, he proceeds to demonstrate the ratios of the diatessaron, diapente, and diapason, and thereby leads to an enquiry concerning the modes of the ancients, which, agreeable to Ptolemy, he makes to be eight.

The ecclesiastical tones come next under his consideration; and of these he gives an explanation not near so copious, but to the same effect with that contained in the *Practica Musicae utriusque Cantus* already given at length.

The same may be said of that part of this work, wherein the measures of time are treated on; a brief account of them, and of the ligatures, and also of the pauses or rests, is here given, but for more ample information the author refers his reader to his former work.

The fourth part of this tract contains the doctrine of counterpoint.

In the fifth and last part the proportions of greater and lesser inequality are very accurately discussed; these are solely applicable to the *Cantus Mensurabilis*, but, as for reasons herein before given, the use of intricate proportions has long been exploded, and the simple ones have been found to be better characterized by numbers than by the terms formerly used for that purpose, a particular account of the contents of this last book seems to be no way necessary.

CHAP. LXV.

OF the work *De Harmonia Musicorum Instrumentorum*, little more need be said than that it was printed at Milan in 1518, and is dedicated to Johannes Grolerius, questor or treasurer of Milan to Francis I. king of France. It is a general exhibition of the doctrines contained in the writings of the Greek harmonicians, at least of such of them as may be supposed to have come to the hands of its author; for some of them it is not pretended that he ever saw; and for the sense of those with which he appears to have been best acquainted, he seems to have been beholden to Boetius, who in many respects is to be considered both as a translator and a commentator on the Greek writers. In this work of Franchinus the nature of the perfect or immutable system is explained, as are also, as well as the author was able, the genera of the ancients, and the proportions of the consonances. He considers also the division of the tone, and the dimension of the tetrachord, and shews the several species of diatessaron, diapente, and diapasen; and demonstrates, as Boetius has also done, that six sesqui octave tones exceed the diapasen by a comma. He next explains the nature of arithmetical, geometrical, and harmonical proportionality, and shews wherein they differ from each other. In the fourth and last book he treats on the modes of the ancients, in the doing whereof he apparently follows Ptolemy, and speaks of the Dorian as the most excellent.

Notwithstanding the great reputation which Franchinus had acquired by his writings, and the general acquiescence of his contemporaries in the precepts from time to time delivered by him, a professor of Bologna, Giovanni Spataro by name, in the year 1531 made a furious attack upon him in a book entitled *Tractato di Musica*, wherein he takes upon him an examination of Franchinus's treatise *De Practica*, and charges him with gross ignorance in that part of musical science in which Franchinus was confessedly better skilled than any professor of his time, the *Cantus Mensurabilis*. Spataro speaks of his preceptor Bartholomeo Ramis, a Spaniard, who had read lectures at Bologna, which were published in 1482, with the title of *De Musica tractatus, sive Musica practica*, as a man of profound erudition; and cites him as authority for almost everything he advances. He speaks of Franco, who by a mistake he makes to have been a professor of Cologne instead of Liege, as the unquestionable inventor of the *Cantus Mensurabilis*, scarcely mentioning John De Muris in the course of his work; and speaks of Marchettus of Padua as an author against whose judgment there can lie no appeal.

The principal grounds of dispute between Spataro and Franchinus were the values of the several characters that constitute the *Cantus Mensurabilis* and the ratios of the consonances, which the former in some of his writings had ventured to discuss. Spataro was the author also of a tract entitled *Utile et breve Regule di Canto*, in which also he is pretty free in his censures of Franchinus and his writings: and besides these it should seem by Franchinus's defence of himself, published in 1520, that Spataro had written

to him several letters from Bologna, in which the charge of ignorance and vanity was strongly enforced.* In the management of this dispute, which seems to have had for its object nothing less than the ruin of Franchinus as a public professor, it is supposed that Spataro had the assistance of some persons who envied the reputation of his adversary no less than himself did: this may be collected from the title of Franchinus's defence, which is, *Apologii Franchini Gafurii Musici adversus Joannem Spatarium et complices Musicos Bononienses*, and seems to be confirmed by the dedication of the *Tractato di Musica* to Peter Aron of Florence, a writer of some note, and who will be mentioned hereafter, and an epistle from Aron to him, which immediately follows the dedication of the above-mentioned work. To speak in the mildest terms of Spataro's book it is from beginning to end a libel on his adversary, who was a man of learning and integrity; and nothing but the manners of the age in which he lived, in which the style of controversy was in general as coarse as envy and malice could dictate, can excuse the terms he has chosen to make use of; and, to say the truth, the defence of Franchinus stands in need of some such apology, for he has not scrupled to retort the charge of ignorance and arrogance in terms that indicate a radical contempt of his opponent.

The chronology of this controversy is no otherwise to be ascertained than by the apology of Franchinus, which is dated the twentieth day of April, 1520, at which time the author was turned of seventy years of age, and the letters therein mentioned, one whereof bears date February, and the other March, 1519; whereas Spataro's book appears to have been published in 1531: so that it is highly probable that Spataro's book, as it is not referred to in the apology of Franchinus, was not published till after the decease of the latter; yet it may be supposed to contain the substance of Spataro's letters, inasmuch as it includes the whole of the objections which Franchinus in his apology has refuted.

It would be too much to give this controversy at large, the merits of it appear by Franchinus's apology, wherein he has very candidly stated the objections of his opponent, and given an answer to the most weighty of them in the following terms.

'You Spartarius, who are used to speak ill of others, 'have given occasion to be spoken against yourself, 'by falling with such madness on my lucubrations, 'though your attack has turned out to my honour. 'Your ignorance is scarce worth reprehension; but 'you are grown so insolent, that unless your petulance 'be chastised, you will prefer yourself before all 'others, and impute my silence to fear and ignorance. 'I shall now make public your folly which I have so 'long concealed; not with the bitterness it merits 'but with my accustomed modesty. How could you 'think to reach Parnassus, who understand not Latin? 'You who are not above the vulgar class, profess not 'only music, but also philosophy and mathematics, and 'the liberal arts, and yet you have desired me to write

* Morley, *Introd.* pag. 92, says that Spataro wrote a great book on the manner of singing sesquialtera proportion.

'to you in our mother tongue. Could no one else declare war against me but you, who are void of all learning, who infect the minds of your pupils, and pervert the art itself? But though my knowledge be small, yet I have sufficient to detect your errors, and likewise those of your master Bartholomeo Ramis.

'When therefore in your fourteenth description you speak of the sesquioctave 9 to 8 as divided into nine minute parts arithmetically, which you begged from a mathematician, you should know that a division merely arithmetical is not accounted of by musicians, because it does not contain concinnous, perfect intervals; and your mathematician might have marked down that sesquioctave more clearly, had he given the superparticular proportions in this manner, 81, 80, 79, 78, 76, 75, 74, 73, 72, for the two extremes 81 and 72 constitute the sesquioctave. But when you quote the authority of Marchettus of Padua you seem to despise Bartholomeo Ramis, your master, whom you extol as invincible; for he in the first book of his *Practica*, after Guido esteems Marchettus (who is also accounted by Joannes Carthusinus as wanting a rod) not worth even four Marcheta,* and reproves him as erroneous. But I imagine that you only dreamt that Marchettus divided the tone into nine dieses; for if the diesis be the half of the lesser semitone, as Boetius and all musicians esteem it, the tone would contain four lesser semitones, and the half of a semitone, a thing never heard of. This division of the Tone is not admitted by musicians; and if you think that the tone contains nine commas, as some imagine, the contrary is proved by Boetius. Anselmus's division of the system into greater and lesser semitones is no more the chromatic, as Marchettus intimates, than that of the tetrachord given by your mathematician; for in the chromatic tetrachord the two graver intervals do not make up a tone according to Boetius, but are of what I call the mixt genus. Do not think that any proportions of numbers are congruous to musical intervals, except the chords answer the natural intervals.

'In your sixteenth description, spun out to the length of four sheets, you ostentatiously insist on many very unnecessary things; for you endeavour to prove that this mediation 6, 5, 3, is harmonical, because the chords marked by these numbers when touched together produce consonance. This is readily granted, for the extreme terms sound the diapason: the two greater sound the lesser third, which is greater than the semitone by a comma, 80 to 81; and the two lesser the greater sixth, diminished by a comma. These three chords will indeed produce consonance, but not that most sweet mediation of these, 6, 4, 3, which Pythagoras, Plato, and Aristotle extol as the most concinnous mediation possible.

'But in your seventh babbling description you bring this mediation, 1, 2, 3, as truly harmonical, having the diapente towards the grave, and the diapason in the acute, which I do not admit; for the extremes bear not a due proportion to each other. Again the

'duple 2, 1, above the sesquialtera having no harmonical mediation, cannot be as sweet as 6, 4, 3. I add that this happens on account of the equality of the differences (and therefore of the intervals) for the sesquialteral space towards the grave is equal to the duple immediately following it towards the acute, as appears from the thirty-seventh chapter of the second book *De Harmonia Musicorum Instrumentorum*; neither is it equal in sweetness to this mediation of the triple, for this is truly harmonical, but yours is not. You moreover blame Pythagoras for not introducing the Sesquiquarta and Sesquiquinta as concinnous in his system; but these are distant from the entire and proper intervals, namely, the ditone and semiditone, by a comma, and he made use of none but entire intervals in his mediations. Socrates, and the divine Plato, who also heard Draco the Athenian, and Metellus the Agrigentine, followed him: Guido himself described the ecclesiastical cantus diatonically; and before him the popes Ignatius, Basilus, Hilarius, Ambrose, Gelasius, Gregory, used that modulation.

'You seem to imitate your master Ramis (who is as impure as yourself) in petulance and ingratitude, for if he borrowed the Sesquiquarta and Sesquiquinta, as you assert, from Ptolemy, he must be a plagiary in not quoting him; and you who profited by the studies of Gaffurius, yet ungratefully and enviously attack Gaffurius. How can youth studying music profit by the erudition of thy master? who described his very obscure and confused scale by these eight syllables, "Psál li tur per vo ces is tas," wherein the natural lesser semitone is marked by a various and dissimilar denomination; but he frightened and repenting, laid that aside, and was forced to return to the diatonic scale of Guido, in which he has introduced the mixt genus, filled up with as it were chromatic, though false condensations, as appears in the course of his practical treatise.

'In your eighteenth and last description you attack me for having in the third chapter of the fourth book *De Harmonia* ascribed the chord Nete Synemmenon to the acute extreme of the Dorian mode, when the tetrachord of the conjuncts is not admitted in any figure of intervals. This Nete Synemmenon might be called Paranete Diezeugmenon, as they are both in the same place, so that there is not any necessity for the tetrachord of the conjuncts in the production of this tetrachord. Your Ramis, in his practical treatise, constitutes the fourth species of the diapason from D SOL RE to d SOL RE, mediated in G; whereby he makes the first ecclesiastical tone, for the Dorian is the fourth species of the diapason, become plagal from an authentic, and subverts the sacred modulation. You attack me for saying that Ptolemy constituted his eighth or hypermixolydian mode in similar intervals with the hypodorian, asserting that he made them of different diapentes and diatessarons; but you ought to know that the hypermixolydian differs from the hypodorian not formally, but in acumen only, being acuter by a diapason. But do not think that this is the

* A coin of Venice, of small value

'eighth ecclesiastical tone which is plagal, for the contrary is shewn in lib. I. cap. vii. of our Practica.

'In your two first detractory descriptions you object against some things, in themselves not material, in our book *De Harmonia Musicorum Instrumentorum*. I shall first answer that dated at Bologna, the last day of February, 1519. We say that the terms tetrachord and quadrichord are indifferently used, for each comprehends four chords. But the most ancient tetrachord of Mercury sounded the diapason between the two extremes, as in these numbers 6, 8, 9, 12. Neither think that by the term Tetrachord is always meant the consonance diatessaron, for every space containing four chords is called a tetrachord or quadrichord; and even the tritone contained under four chords, from Parhypate meson to Paramese is a tetrachord, though it exceeds the diatessaron. Johannes Cocleus Noricus, the Phonascus of Nuremberg, gave the name of Tetrachordum to his book of music, as being divided into four parts. Samius Lichaon, who added the eighth chord to the musical system, is imagined by most people to be Pythagoras himself.

'I do not forget your babbling when you assert that the Duple and the Sesquialtera conjoined produce the Sesquitercia in this order, 4, 2, 3, making the Duple in 4, 2, and the Sesquialtera in 2, 3; but in this you are wrong, for 2, 3, is here Subsesquialtera.

'In your letter, dated the fifteenth of October, you say you will not answer the questions I proposed to you, which were, whether consonance is not a mixture of acute and grave sounds sweetly and uniformly approaching the ear; and in what manner that mixture is made, whether by the conjunction, or by the adherence of the one to the other: and again, which conduces most to consonance, the grave or the acute, and which of the two predominates. You moreover write that Laurentius Gazius, a monk of Cremona, and well skilled in music, came to you to discourse concerning the canon of your master, and that Boetius was only an interpreter, and not an author in music; in this opinion you are mistaken, for he was the most celebrated lawyer, philosopher, mathematician, orator, poet, astronomer, and musician of his age, as his almost innumerable works declare. And Cassiodorus bears witness of his musical erudition in the epistle of the emperor Theodoric to Boetius himself, to this purpose: "When the king of the Franks, induced by the fame of our banquet, earnestly requested a Citharædist from us, the only reason why we promised to comply, was because we knew you were well skilled in the musical art."

After a very severe censure on a Canticum of Bartholomeo Ramis, produced by him in a lecture which he publicly read at Bologna, Franchinus concludes with saying, that 'the precepts delivered by him will, if not perverted, appear to be founded in truth and reason; and that though his adversary Spataro should grow mad with rage, the works of Gaffurius, and the fame of his patron Grolierus will live for ever.'

PIETRO ARON, a Florentine, and a canon of Rimini,

of the order of Jerusalem, and the patron of Spataro, was the author of *Libri tres de Institutione harmonica*, printed at Bologna, 1516; *Tratto della Natura e Cognitione di tutti gli Tuoni di Canto figurato*, Vinegia 1525. *Lucidario in Musica di alcune Oppenioni antiche et moderne*, Vinegia 1545. *Toscanello de la Musica*, Vinegia 1523, 1529. *Novamente Stampato con la gionta*, 1539. *Compendiolo di molti dubbi Segreti et Sentenze intorno al Canto Fermo et Figurato*, Milano 15—. The first of these was originally written in the Italian language, and is only extant in a Latin translation of Johannes Antonius Flaminus Forocorneliensis, an intimate friend of the author.

The work entitled *Toscanello* is divided into two books; the first contains an eulogium on music, and an account of the inventors of it, drawn from the ancient poets and mythologists. In this definition of music the author recognizes the division of it by Boetius and others into mundane, humane, and instrumental music. After briefly distinguishing between vocal and instrumental music, he by a very abrupt transition proceeds to an explanation of the *Cantus Mensurabilis* and the ligatures, in which he does but repeat what had been much better said by Franchinus and others before him.

The second book treats of the intervals and the consonances, and in a very superficial manner, of the genera of the ancients. From thence the author proceeds to a declaration of counterpoint, for the composition whereof he delivers ten precepts; these are succeeded by a brief explanation of the several kinds of proportion, of greater and lesser inequality, and of arithmetical, geometrical, and harmonical proportionality; the remainder of the book consists of directions for dividing the monochord according to the rule of Guido Aretinus, with a chapter intitled *De la Participazione et Modo da cordare l'Instrumento*.

In the course of his work he highly commends as a theorist Bartholomeo Ramis, the preceptor of Spataro, styling him '*Musico dignissimo, veramente da ogni dotto venerato*'; and as practical musicians he celebrates Iodocus Pratensis by the name of Josquino, Obreth, Busnois, Ocheghen, and Duffai. To these in other places he adds Giovanni Mouton, Richafort, Pierazzon de Larve, Allessandro Agricola, and some others, of whom he says they were the most famous men in their faculty.

The edition of the *Toscanello* of 1539 has an appendix, which the author intitles '*Aggiunta del Toscanello, à complacenza de gli Amici fatta*,' containing directions for the intonation of the Psalms, and the singing of certain offices on particular festivals.

The writings of Peter Aron contain nothing original or new; for it is to be observed that Boetius and Franchinus had nearly exhausted the subject of musical science, and that few of the publications subsequent to those of the latter contain anything worthy of notice, such as treat of music in that general and extensive way in which Kircher, Zarlino, and Merseus have considered it.

The ten precepts of counterpoint, which constitute

the twenty-first and nine following chapters of the second book of the Toscanello, seem to carry in them the appearance of novelty, but they are in truth extracted from the writings of Franchinus, though the author has studiously avoided the mention of his name. They are in effect nothing more than brief directions for adjusting the parts in an orderly succession, and with proper intervals between each, in a composition of many parts. Morley appears to have studied Peter Aron, and has given the substance of his precepts, very much improved and enlarged, in the third part of his Introduction.

The above restriction of the precepts of music to the number of ten, is not the only instance of the kind that we meet with in the works of writers on the science: Andreas Ornithoparcus, of Meyning, has discovered as great a regard for this number, founded perhaps in a reverence for the Decalogue, as Peter Aron has done; for in his *Micrologus*, printed at Cologne in 1535, he has limited the precepts for the decent and orderly singing of divine service to ten, though they might with great propriety have been increased to double that number.

CHAP. LXVI.

ABOUT the same time with Franchinus and Peter Aron flourished John Hamboys, of whom bishop Tanner in his *Bibliotheca* gives the following account:—

‘JOHN HAMBOYS, a most celebrated musician, and a doctor in that faculty. Bale calls him a man of great erudition; and adds, that being educated in the liberal sciences, he in his riper years applied himself to music with great assiduity. He wrote *Summam Artis Musicæ*, lib. i. beginning “*Quemadmodum inter Triticum.*” The MS. book in the Bodleian library, Digby 90, which has for its title *Quatuor Principalia Musicæ*, lib. iv. completed at Oxford, 1451, has the same beginning. Wrongfully therefore in the catalogues, and by A. Wood, is it assigned to Thomas of Teukesbury.’

Hamboys was the author also of certain musical compositions, entitled *Cantionum artificialium diversi Generis*, and is said to have flourished anno 1470. *Bal. viii. 40. Pits*, pag. 662.

In Holinshed’s *Chronicle*, vol. II. pag. 1355, is an enumeration of the most eminent men for learning during the reign of Edward IV.* in which the author

* It is highly probable from the establishment of his chapel, and the provision therein made for a succession of singers, that this prince was a lover of music, and a favourite of musicians; and it seems that Hamboys, though very eminent, was not the only celebrated musician of his time; for in Weever’s *Funeral Monuments*, pag. 422, is the following inscription on a tomb, formerly in the old church of St. Dunstan in the East:—

Clausus in hoc tumultu Gullelmus Payne requiescit,
Quem sacer editum fouerat iste locus.
Clarum cui virtus, ars et cui musica nomen
Eduardi quarti regis in ede dabat.
Si tibi sit pietas, tumuli si cura, viator,
Hoc optes illi quod cupis ipse tibi,
Ob. 1508.

Another musician of the same surname is noted by an inscription in the parish church of Lambeth in Surrey, in these words:—

Of your charity pray for the soul of Sir Ambrose Payne, parson of Lambeth, and bachelour of musick, and chapelyn to the lords cardynals Boufar and Morton, who departed May the xxviii. A.D. 1528.

includes John Hamboys, an excellent musician, adding, that for his notable cunning therein he was made doctor of music.

There is reason to suppose that Hamboys was the first person on whom the degree of doctor in music was conferred by either of the universities in this kingdom, at least there is no positive evidence to the contrary; and as to the antiquity of degrees in music, although the registers of the universities do not ascertain it, academical honours in this faculty may be traced up to the year 1463, for it appears that in that year Henry Habington was admitted to the degree of bachelor of music at Cambridge; and that in the same year Thomas Saintwix, doctor in music, was made master of King’s College in the same university.†

Such as are concerned for the honour of the science will look upon this as a remarkable era. And if we consider the low estimation in which music is held by persons unacquainted with its principles, it must appear somewhat extraordinary to see it ranked with those arts which entitle their professors not merely to the character of learned men, but to the highest literary honours. How and for what reasons music came to be thus distinguished, will appear by the following short deduction of its progress between the year 1300, and the time now spoken of.

As to the *Cantus Gregorianus* and the tonal laws, they were a mere matter of practice, and related solely to the celebration of the divine offices, but the principles of the science were a subject of very abstruse speculation, and in that view music had a place among the liberal arts. This discrimination between the liberal and manual or popular arts is at least as ancient as the fourth century, for St. Augustine himself takes notice of it, and these two admitted a distinction into the Trivium and Quadrivium, which already in the course of this work has been noted: in the former were included grammar, rhetoric, and logic; in the latter arithmetic, music, geometry, and astronomy. Du Cange explains these terms by saying that the Trivium signified the threefold way to eloquence, and the Quadrivium the fourfold way to knowledge. In what a barbarous manner the sciences were taught may be in some degree inferred from a treatise on them by the famous Alcuin, the preceptor of Charlemagne, and that other of Cassiodorus, entitled *De septem Disciplinis*. In the greater part of the schools the public teachers ventured no farther than the Trivium, confining their instructions to grammar, rhetoric, and logic; but those of their disciples who had passed both the Trivium and Quadrivium were referred to the study of Cassiodorus and Boetius. It is easy to discover from this account of the method of academical institution, the

† It is conjectured that about this time music was arrived at great perfection in this country; to this purpose we meet with the following remarkable passage in the *Morie Encomium* of Erasmus, Basil edition, pag. 104:—‘*Natura ut singulis mortalibus suam, ita singulis nationibus, ac penè civitatibus communem quandam inesse Philautium: atque hinc fieri Britann præter alia, formam, musicam, et lautas mensas propriè sibi vindicent.*’ *Viz.* As nature has implanted self-love in the minds of all mortals, so has she dispensed to every country and nation a certain tincture of the same affection. Hence it is that the English challenge the prerogative of having the most handsome women, of the being most accomplished in the skill of music, and of keeping the best tables.

track in which the students of music were necessitated to walk: utterly ignorant of the language in which the precepts of harmony were originally delivered, and incapable of viewing them otherwise than through the medium of a Latin version, they studied Marcinus Capella, Macrobius, Cassiodorus, Boetius, Guido Aretinus, and those numberless authors who had written on the tones and the Cantus Mensurabilis; and in these their pursuits the students in the English universities of Oxford and Cambridge, for it nowhere appears to have been the practice in other countries, were rewarded with the academical degrees of bachelor and doctor.*

* The statutes of the two universities prescribe the exercises for degrees in this and the other faculties, but they leave us at a loss for the regimen of students in the pursuit of them. It is however certain that formerly a course of study subjected the candidates for academical honours to a greater degree of hardship than we at this day are aware of. In a sermon of Master Thomas Leuer, preached at Poules Cross the xij day of December, anno 1556, is a description of college discipline, that in this age of refinement would make a student shudder; these are the author's words: "There were [in the time of Hen. VIII.] in houses belonging to the universitie of Cambridge two hundred students of divinitie, many very well learned, whiche be now all cleane gone, house and man; yong towards scholars, and old fatherly doctors, not one of them left: one hundred also of another sort, that having rich friends, or being beneficed, did live of themselves in oeties and innes, be either gone away, or else faine to crepe intoo colleges, and put poor men from bare livings. Those both be all gone, and a small number of poor diligent students now remainyng only in colleges, be not able to tarry and continue their study in the universitie for lack of exhibition and helpe. There be divers there which rise daily betwixt iij. and fyve of the clock in the mornyng, and from fyve until syxe of the clocke use common prayer, with an exhortation of God's word, in a common chappell, and from syxe untill ten use ever yether private study or commune lectures. At ten of the clocke they go to dinner, where as they be contented with a penke peice of beef amongst iij. havinge a few potage made of the brothe of the same beefe, with salt and ostmale, and nothing elles. After this slender dyner they be either teachinge or learninge until v. of the clocke in the evnyng, when as they have a supper not muche better then their dinner, immediately after the which they go either to reasoning in problems, or unto some other studie, until it be nyne or tenne of the clocke, and there beyng without fire, are faine to walke or runne up and downe halfe a houre to get a hete on their fete when they go to bed."

The late learned Mr. Wise of Oxford, was of opinion that degrees in music are more ancient than the time above-mentioned. His sentiments on the subject, and also touching the antiquity of degrees in general, are contained in a letter to a friend of his, from which the following passage is extracted:—

"England, in the time of the Saxons, through means of its frequent intercourse with Rome, and its neighbourhood to France, seems to have arrived at as great a pitch of excellence in all good arts as any other nation of the Christian world during that dark period of time. This appears from several remains of poetry in Saxon and Latin, from some buildings, jewels, and vast numbers of fair manuscripts written by the Saxons, and illuminated in as fair a manner as the taste of that age would admit of. Amongst other arts, music does not seem to have been one of the least studied amongst them, several specimens of their skill in church-music remaining to this day, particularly a fair manuscript, formerly belonging to the church of Winchester, now in the Bodleian Library, called a Troparion, written in the reign of king Ethelred the West-Saxon."

"His brother and immediate successor, Alfred the Great, as he is reported by historians to have been excellent in all sorts of learning, and a very great proficient in civil as well as military arts, so is he particularly recorded for his skill in music, by which means he obtained a great victory over the Danes."

"It is therefore not to be wondered at, that upon restoring the Muses to their ancient seat at Oxford, he should appoint amongst the rest of the liberal arts a professor of music, as we expressly read he did, anno 886. [Annals of Hyde, quoted by Harpsfield] namely, John, the monk of St. David's."

"As to the origin of degrees in general in the universities, though nothing certain appears upon record, yet they seem from the very nature of them, to be almost, if not quite, as old as the universities themselves; it being necessary, even in the infancy of an university, to keep up the face and form of it, by distinguishing the proficients in each science according to the difference of their abilities and time spent in study, as it is now to divide school-boys into forms or classes."

"Our university, like others, being founded in the faculty of arts, degrees were accordingly given in logic, geometry, and each particular one, and in process of time in all of them together, the degree of master of arts being the highest in the university. But when the faculties of law and physic came into esteem in the world, and at length into the university, I don't mention divinity, because that was always cultivated here, then the lesser arts began to decline in their credit, as being less gainful; and degrees in most of them were entirely dropt, as logic, arithmetic, geometry, and astronomy; rhetoric indeed maintained its ground till the beginning of the sixteenth century, and grammar (because nobody was allowed to teach it unless graduated in one of the universities) held it a good while longer; but music has maintained its

In the *Fasti*, at the end of the *Athen. Oxon.* vol. I. which commences at 1500, mention is frequently

'credit to this time, and with this remarkable advantage over the rest of its sister arts, that whereas the only degrees of them were bachelor, or at most master, music, for what reason I am at present at a loss, gives the title of doctor.'

Bachelor is a word of uncertain etymology, it not being known what was its original sense. Junius derives it from *Bachellos*, foolish. Menage from *Bas Chevalier*, a knight of the lowest rank. Spelman from *Baculus*, a staff. Cujas from *Buccella*, an allowance of provision. The most probable derivation of it seems to be from *Bacca Laurus*, the berry of a laurel or bay; bachelors being young and of good hopes, like laurels in the berry. In Latin *Baccalaureus*. Johns. Dict. in art. *Vide Ayliffe* a ancient and present State of the University of Oxford, vol. II. pag. 195.

By the statutes of the university of Oxford, it is required of every pre-ceeder to the degree of bachelor in music, that he employ seven years in the study or practice of that faculty, and at the end of that term produce a testimonial of his having so done, under the hands of credible witnesses; and that previous to the supplication for his grace towards this degree, he compose a song of five parts, and perform the same publicly in the music-school, with vocal and instrumental music, first causing to be affixed on each of the doors of the great gates of the schools a *Programma*, giving three days notice of the day and hour of each performance. Of a bachelor, proceeding to the degree of doctor, it is required that he shall study five years after the taking his bachelor's degree; and produce the like proof of his having so done, as is requisite in the case of a bachelor, and farther, shall compose a song in six or eight parts, and publicly perform the same 'tam vocibus quam instrumentis etiam musicis.' on some day to be appointed for that purpose, previously notifying the day and hour of performance in the manner before prescribed. Such exercise to be performed in the presence of Dr. Heyther's professor of music. This being done, the candidate shall supplicate for his grace in the convocation-house, which being granted by both the Savilian professors, or by some master of arts deputed by them for that purpose, he shall be presented to his degree.

The statutes of the university of Oxford, do in like manner prescribe the exercises for degrees in the other faculties, but in terms at this day so little understood, that an attempt to explain them in this place may to some be not unacceptable. In Title VI. Sect. 2. De Exercitiis præstandis pro Gradu Baccalaurei in Artibus, the exercises required are Disputations in Parvallis: on this term the following are the sentiments of glossographers:—

Before the schools were erected the young students held their disputations in Parvallis, in the porch of St. Mary's church. There they sat, vis-a-vis, one over against the other. This might be expressed in the Norman French of those times perhaps by *Par-Vis*, and this again in barbarous Latin would be rendered by in Parvallis.

In Skinner's Lexicon the word *Parvis* is said to signify in Norman French a church-porch; and he quotes Spelman, as deriving it from the word *Paradisius*. Perhaps, says he, because the porch was, with respect to the church itself, what Paradise is to Heaven. This reason is harsh and whimsical; the word *Parvis* seems rather to be a corruption of a barbarous Latin word *Pervisus*, from *Pervisio*, to look through, because people looked through the porch into the church. Or if, as is frequently the case, one porch was opposite to the other, then at the porch people might be said to look through the church. *Pervisus* then, or *Parvis* is literally speaking the place of looking-through.

Chaucer, in the Prologues to the *Canterbury Tales*, characterizing the Sergeant at Law, says,—

A fergeant of lawe, ware and wife,
That often had ben at the pervise.

And in the Glossary at the end of Urry's edition, the word *Pervise* is thus explained: 'Parvis, Fr. contracted from *Paradis*, Παράδεισος, Τόπος ἐν ᾧ περιπατοῦν. Hesych. *Locus porticus et deambulatorius circumdatus*. A Portico or court before a church. Fr. *Gl. in Paradisum*. The place before the church of *Notre Dame* at Paris, called *Parvis*, R.R. 7151, was anciently called *Paradis*. Men. Fr. in *Parvis*, Spelman says in *Parvis*, &c. that our lawyers used formerly to walk in such a place to meet their clients, and not for law exercises, as *Blount* and others write, being perhaps led into that mistake by that passage, Prol. 313; and others, considering the context more than the sense of the word *Pervise*, explain it a bar.'

Another writer says of this word that it signifies the nether part of a church, set apart for the teaching of children in it, and that thence it is called the *Parvis*, a parvis parvis ibi edocuit; adding that this sense of it explains the following story in Matthew Paris, Hist. Angl. in Hen. III. pag. 798:—

'In the reign of king Hen. III. the pope's collector met a poor priest with a vessel of holy water, and a sprinkler, and a loaf of bread that he had gotten at a place for sprinkling some of his water; for he used to go abroad, and bestow his holy water, and receive of the people what they gave him, as the reputed value thereof. The pope's collector asked him what he might get in one year in that way? The priest answered about twenty shillings; to which the collector presently replied, then there belongs as due out of it, as the tenths, two shillings to my receipt yearly, and obliges him to pay it accordingly. Upon which now comes the passage, "Cogebatur ille pauperculus, multis diebus scholas exerceens, venditis in Parvis libellis, vitam famelicam procellare pro illa substantia persolvenda." i. e. The poor priest, to enable him to pay that imposition, and to get a sort of livelihood, was constrained to take up the trade of selling little books at the school in the Parvis. And hence it is, as some think, that the French call the *Procurator*, *le Parvis*.' History of Churches in England, by Thomas Staveley, octavo, 1712, pag. 157. For more on this subject consult the Glossary to Dr. Wats's edition of Matthew Paris, and that of Somner to

made of admission to bachelors' degrees in the several faculties, and of the privilege thereby acquired of reading publicly on certain books in each of them respectively, for instance, in divinity the graduate was allowed to read the Master of the Sentences; in civil law, the Institutes of Justinian; in canon law, the Decretals; in physic, Hippocrates; in arts, the Logic of Aristotle; and in music, Boetius: thus, to give an instance of the latter, Henry Parker, of Magdalen-hall, in 1502, John Mason, and John Sherman, in 1508, John Wendon, and John Clawsey, in 1509, John Dygon, a Benedictine monk, in 1512, and Thomas Mendus, a secular chaplain, in 1534, were severally admitted to the degree of bachelor of music; and of such it is said in the *Fasti*, Col. 5, and again Col. 69, that they were thereby admitted to the reading of any of the musical books of Boetius, which at that time were almost the only ones from whence any knowledge of the principles of the science could be derived.

The efforts of Franchinus for the improvement of music are related in the foregoing account of him and his writings, and the advantages which accrued from his labours may in some measure be deduced from thence as a necessary consequence; but the disseminating his precepts by writing through the learned world, was not all that he did towards the advancement of the science, for besides this he laid a foundation for endless disquisition, by procuring copies of the works of the ancient Greek harmonicians, the masters of Boetius himself, and by causing translations of them to be made for the use of the many that were absolutely ignorant of the language and character in which they were written. But the operation of these his labours for the advancement of the science must necessarily have been very slow, and will hardly account for those amazing improvements in the art of practical composition which appear in the works of Iodocus Pratensis, Orlando de Lasso, Philipppo de Monte, Andrian Willaert, and in short, of the musicians in almost every country in Europe to whom the benefit of his instructions had extended. These are only to be accounted for by that part of his history which declares him to have been a public professor of the science, and to have taught publicly in some of the principal cities of Italy. This he did to crowded auditories, at a time when the inhabitants of Europe were grown impatient of their ignorance: when the popes and secular princes of Italy were giving great encouragement to learning. This disposition co-operating with the labours of the studious and industrious in the several faculties, brought about a reformation in literature, the effects whereof are felt at this day. Not to mention the arts of painting and sculpture, which were now improving apace, it may

the *X Scriptores*, voce *TRIPORTUM*, and Selden in his notes on *Fortescue De Laudibus*.

In the statutes of the university of Oxford, Tit. VI. Sect. 3. 'De disputationibus in Parvulo, tum habendis, tum frequentandis,' we meet with the term *Disputationes* in *Augustinensibus*: these, in the academical style of speaking, were disputations with the Augustine monks, who had acquired great reputation for exercises of this kind, and had formerly a monastery at Oxford, the site whereof was afterwards purchased for the purpose of erecting Wadham College. With them the students held disputations at the place, and in the manner above related. Some traces of this practice yet remain in the university exercises; and the common phrase of young scholars, 'answering Augustine's' or 'doing Austin's,' has a direct allusion to it.

suffice to say, that at this time men began to think and reason justly on literary subjects; and that they did so in music was owing to the discoveries of Franchinus, and his zeal to cultivate the science; for no sooner were his writings made public than they were spread over Europe, and the precepts contained in them inculcated with the utmost diligence in the many schools, universities, and other public seminaries throughout Italy, France, Germany, and England; and the benefits resulting from his labours were manifested, not only by an immense number of treatises on music, which appeared in the world in the age next succeeding that in which he flourished, but in the musical compositions of the sixteenth century, formed after his precepts, and which became the models of musical perfection. Of these latter it will be time enough to speak hereafter: of the authors that immediately succeeded him, and the improvements made by them, it is necessary to say something in this place.

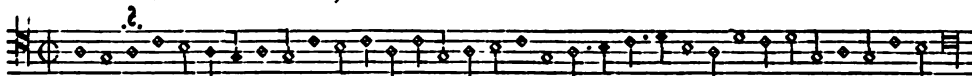
The first writer on music of any note after Franchinus and Peter Aron seems to have been *JACOBUS FABER STAPULENSIS*, who flourished about the year 1503. Among other works, he has left behind him four books on music, entitled *Elementa Musicalia*, printed at Paris in 1496 and 1551, a thin folio. In the beginning of this work he celebrates his two masters in the science, *Jacobus Labinius*, and *Jacobus Turbelinus*. *Josephus Blancanus* held it in such estimation, that he recommends to students that they begin with the study of it above all other things; and that after reading it, they proceed to Boetius, *Aristoxenus*, *Ptolemy*, and *Euclid*. *Salinas* speaks very differently of the *Elementa Musicalia*, for he says it discovers that the author knew more of the other parts of mathematics than of music; he however commends the author for having treated the subject with a degree of perspicuity equal to that of *Euclid* in his *Elements of Geometry*. He adds, that he does not seem to have read *Ptolemy*, or any other of the Greek writers, but is entirely a Boetian, and does nothing more than demonstrate what he has laid down. This is certainly a very favourable censure; *Salinas* might truly have called the book a partial abridgment of Boetius, for such it must appear to every attentive peruser of it. *Faber* was of *Picardy*; his name, in the language of his own country, was *Jacques Le Fevre D'Estaples*; he was a doctor of the *Sorbonne*, and beloved by *Erasmus*. *Bayle* relates that he was once in the hands of the inquisitors, but was delivered by the queen of *Navarre*. *Buchanan* has celebrated his learning in the following elegant epitaph:—

Qui studiis primus lucem intulit omnibus, artes
Edoctum cunctas hæc tegit urna Fabrum.
Heu! tenebræ tantum potuere extinguere lumen?
Si non in tenebris lux tamen ista micet.

The improvements made by Franchinus were followed by another of very considerable import, namely, the invention of *Fugue*, from the Latin *Fuga*, a chase, a species of symphoniac composition, in which a certain air, point, or subject is propounded by one part and prosecuted by another.

Zarlino resembles it to an echo; and it is not improbable that the accidental reverberation of some passage or particle of a musical tune might have originally suggested the idea of composition in fugue. The merit of this invention cannot, at this distance of time, be ascribed to any one musician in preference to another, but the antiquity of it may, with great appearance of probability, be fixed to about the beginning of the sixteenth century: this opinion is grounded on the following observations.

Franchinus, the most ancient of the musical writers who have expressly treated on composition in symphony, seems to have been an absolute stranger to this species of it, for his precepts relate solely to counterpoint, the terms fugue or canon never once occurring in any part of his writings; and the last of his tracts, viz., that *De Harmonia Musicorum Instrumentorum*, as already has been remarked, was published in 1518. On the other hand, in the Dode-



Comparing therefore the date of Franchinus's last treatise with that of the *Micrologus*, the interval between the publication of the one and the other of them appears to be seventeen years, a very short period for so considerable an improvement in the practice of musical composition.

It is natural to suppose that the first essays of this kind were fugues in two parts; and a fugue thus constructed was called two parts in one, for this reason, that the melody of each might be found in the other. In the framing of these parts, two things were necessary to be attended to, namely, the distance of time or number of measures at which the reply was to follow the principal subject, and the interval between the first note in each: with respect to the latter of these particulars, if the reply was precisely in the same notes with the subject, the composition was called a fugue in the unison; and if in any other series of concordant intervals, as namely, the fourth or fifth above or below, it was denominated accordingly, as hereafter will be shewn. The primitive method of noting fugues appears by the following examples of two parts in one, contained in an ancient manuscript on vellum, of one Robert Johnson, a priest, the antiquity whereof may be traced back to near the beginning of the sixteenth century; the first of these is evidently a fugue in the unison, of two parts in one, and the latter a fugue of two parts in one in the eleventh, or diapason cum diatessaron,*

* In compositions of this kind it seems to have been the ancient practice to frame them on a given plain-song, and that in general was some well-known melody of a psalm or hymn.

The plain-song on which this fugue is composed is taken from the notes of an ancient hymn, *O Lux beata Trinitas*, which seems to have been a very popular melody before the time of king Henry VIII. In Skelton's poem, entitled, *The Bouge of Court*, Riot is characterized as a rude, disorderly fellow, and one that could upon occasion sing it,

'Counter he coulede *O Lux* upon a potte,'

And Bird, whose excellence in this kind of composition is well known, made a great number of canons, on this very plain song.

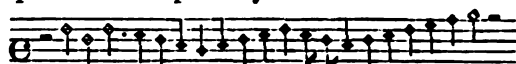
A practice similar to this, of composing songs and divisions for instruments on a ground-base, prevailed for many years; and it was not become quite obsolete in the time of Corelli, whose twelfth solo is a division on a well-known melody, known in England by the name of

cachordon of Glareanus of Basil we meet with fugues to a very great number, and indeed with a canon of a very extraordinary contrivance, composed by Iodocus Pratensis, for the practice of his master Lewis XII. king of France.

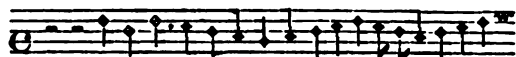
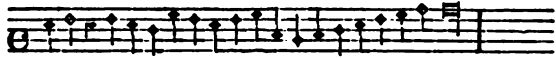
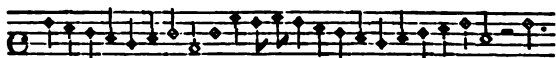
But to draw a little nearer towards a conclusion, there is extant a book entitled *Micrologus*, written by Andreas Ornithoparcus of Meyning, a master of arts, and a professor of music in several universities in Germany. This book was first published at Cologne in 1535, and contains, lib. II. cap vii. a definition and an example of canon to the following purpose:—

'A canon is an imaginary rule, drawing that part of the song which is not set down out of that which is set down. Or it is a rule which doth wittily discover the secrets of a song. Now we use canons either to shew art, or to make shorter work, or to try others cunning, thus:—

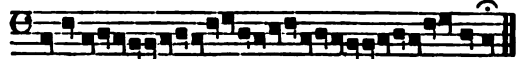
as will appear by comparing the latter with the former part of each respectively.



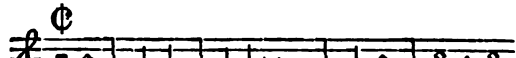
Two parts in one, in one voyce, A mynnym after another.



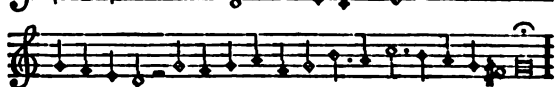
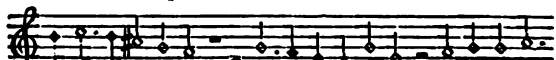
The other part.



O LUX



Two parts in one, An eleventh above another.

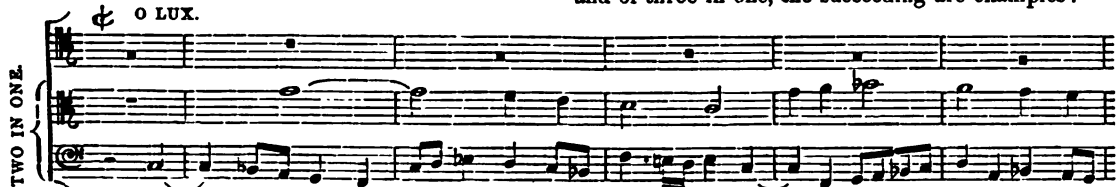


Farinel's Ground; as is also the twelfth of Vivaldi's *Suonate da Camera*, Opera prima.

That Purcell was very fond of this kind of composition, appears throughout the *Orpheus Britannicus*, and elsewhere in his works, as well for the church as the theatre. In the year 1667 a book was published in Latin and English, by Christopher Simpson, a famous violist, entitled '*Chelys minuritionum artificio exornata*,' or, the *Division Viol*, containing a great variety of old grounds, with divisions thereon: these were the constant exercises of practitioners, as well on the violin as the viol, till the time that Corelli's music was first introduced into England, before which he was looked on as an excellent performer who could play the country-dance tune of Old Sir Simon the king, with the divisions.



This which immediately follows is the resolution of a canon of two parts in one, composed by Bird, on the same plain song as the former, with this difference, that the reply is in longer notes than the principal, for which reason, it is called a fugue by diminution. Of these two kinds as also of fugue of four parts in two, and of three in one, the succeeding are examples:—



WILLIAM BIRD.



WILLIAM BIRD.

♩ MISERERE.

THREE IN ONE.

WILLIAM BIRD.

Of the foregoing canons of Bird it may be remarked, that as the former examples of two parts in one are studies on the well-known plain-song of *O Lux*, so this is an exercise on a plain-song of *Miserere*, for the origin whereof we are to seek: the celebrity of it may however be inferred from this circumstance, that Dr. John Bull, who was exquisitely skilled in canon, made a variety of compositions on it, some whereof will hereafter be inserted. But we are told by Morley that Bird and Alphonso Ferabosco made canons, each to the number of forty, and his friend Mr. George Waterhouse above a thousand, upon the same plain song of *Miserere*, and it is probable that this of Bird is one of the number. The passage is curious, and is as follows: 'If you thinke to imploy anie time in making of parts on a plain-song, I would counsell you diligentlie to peruse those waies which my loving maister (never without reverence to be named of musitiens) M. Bird and M. Alphonso, in a virtuous contention in love between themselves, made upon the plain-song of *Miserere*; but a contention as I said in love, which caused them strive everie one to surmount another without malice, envie or backbiting: but by great labour, studie, and paines each making other censure of that

'which they had done. Which contention of theirs, 'speciallie without envie, caused them both become 'more excellent in that kind, and winne such a name, 'and gaine such credite, as will never perish so long 'as musicke indureth. Therefore there is no waie 'readier to cause you become perfect than to contend 'with some one or other, not in malice (for so is 'your contention upon passion not for love of vertue) 'but in love shewing your adversarie your worke, 'and not scorning to bee corrected of him, and to 'amende your fault, if hee speake with reason: but 'of this enough. To return to M. Bird and M. 'Alphonso, though either of them made to the number of fortie waies, and could have made infinite 'more at their pleasure, yet hath one manne, my 'friend and fellow, M. George Waterhouse,* upon 'the same plain-song of *Miserere* for varietie sur- 'passed all who ever laboured in that kinde of studie.

* Of this person, so excellent in music as he is above said to have been, as far as appears after a diligent research and enquiry, there is not a single composition remaining. All that can be learned concerning him is, that he was first of Lincoln, and afterwards of the chapel to queen Elizabeth, and that having spent several years in the study and practice of music, in the year 1592 he supplicated at Oxford for the degree of bachelor, but Wood was not able to discover that he was admitted to it. Fasti, Anno 1592. By the entry in the cheque-book of the chapel royal, it appears that he died the eighteenth day of February, 1601.

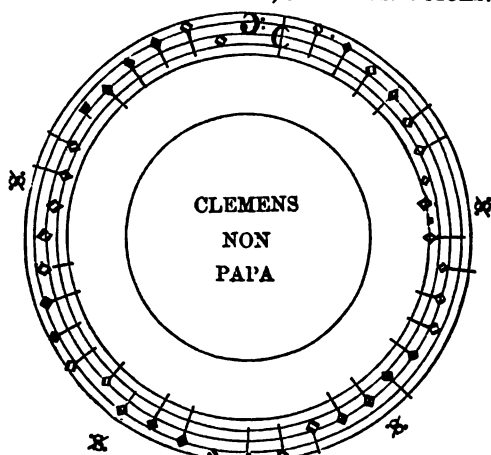
'For hee hath already made a thousand waies (yea, and though I shoulde talk of halfe as manie more, I should not be far wide of the truth) everie one different and several from another. But because I do hope very shortlie that the same shall be published for the benefite of the worlde, and his owne perpetual glorie, I will cease to speake anie more of them, but onlie to admonish you, that whoso will be excellent must both spende much time in practice, and looke over the doings of other men.'

Touching these exercises, it is to be observed, that they are calculated to facilitate the practice of composing in fugue, by exhibiting the many various ways in which the point may be brought in; or, in other words, how the replicate may be made to correspond with, or answer, the principal. The utility of this kind of study may be in some measure inferred from a variety of essays in it by Bird, Bull, and others, yet to be met with in ancient collections of music; and to a still greater degree from a little book entitled 'Divers and sundrie waies of two parts in one to the number of fortie upon one playn-song; sometimes placing the ground above and two parts benethe, and otherwise the ground benethe, and two parts above. Or againe, otherwise the ground sometimes in the midst betweene both. Likewise other conceites, which are plainlie set downe for the profite of those which would attaine unto knowledge, by John Farmer, imprinted at London, 1591,' small octavo.

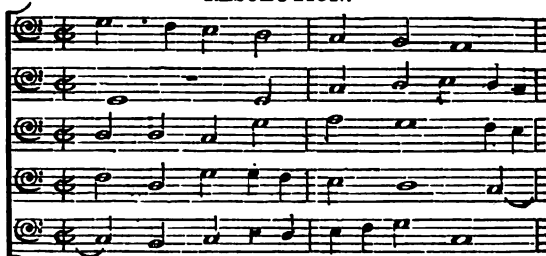
Elway Bevin, a disciple of Tallis, a gentleman extraordinary of the royal chapel in 1605, and organist of the cathedral church of Bristol, published in the year 1631, a book, which, though entitled a Brief Introduction of Music and Descant, is in truth a treatise on canon, and contains a manifold variety of fugues of two, three, and more parts in one, upon one plain-song most skilfully and ingeniously constructed; but of him, and also of this his work, an account will be given hereafter.

Fugues in the unison were also called rounds, from the circular progression of the melody; and this term suggested the method of writing them in a circular form, of which the following canon of Clemens Non Papa, musician to the emperor Charles V. with the resolution thereof in modern characters, is an example:—

CANON IN THE UNISON, FOR FIVE VOICES.



RESOLUTION.



A fugue written in one line, whether in a circle or otherwise, with directions for the other parts to follow, is called a Canon. Morley ascribes the invention of this compendious method of writing to the Italian and French musicians; his account of it is curious, and is here given in his own words: 'The Frenchmen and Italians have used a waie, that though there were four or five partes in one, yet might it be perceived and sung at the first; and the manner thereof is this. Of how manie parts the canon is, so manie cliefes do they set at the beginning of the verse; still causing that which standeth nearest unto the musick serve for the leading parte; the next towards the left hand for the next following parte, and so consequentie to the last. But if betweene anie two cliefes you finde rests, those belong to that part which the cliefe standing next unto them on the left side, signifieth.

EXAMPLE.



'Here be two parts in one in the Diapason cum diatessaron, or, as we tearme it, in the eleventh above; where you see first a C SOL FA UT cliefe standing on the lowest rule, and after it three minime rests. Then standing the F FA UT cliefe on the fourth rule from below; and because that standeth nearest to the

'notes, the base (which that cliefe representeth) must begin, resting a minim rest after the plain-song, and the treble three minime rests. And least you should misse in reckoning your pauses or rests, the note whereupon the following part must begin is marked with this sign 2. It is true that one of those two,

'the sign or the rests is superfluous; but the order of setting more cliftes than one to one verse being but of late devised, was not used when the signe was most common, but instead of them, over or under the song was written in what distance the following parte was from the leading, and most commonlie in this manner, Canon in,* or * superiore

'or interiore. But to shun the labour of writing those words, the cliftes and rests have been devised, shewing the same thinge. And to the intent you may the better conceive it, here is another example wherein the treble beginneth, and the meane followeth within a semibreve after, in the Hypodia-pente or fifth below':—



The above relation of Morley accounts for the origin of the term Canon, which in truth signifies no more than a rule; but no sooner was it invented, than it was applied to perpetual fugue, even in the score; and perpetual fugue and canon were then, and now are, looked on as convertible terms; than which it seems nothing can be more improper, for when a fugue is once scored it ceases to be a canon.

From fugues in the unison, or of many parts in one, musicians proceeded to the invention of such as gave the answer to the subject, at a prescribed distance of time, in some concordant interval, as namely, the fourth, fifth, or eighth, either above or below; and to distinguish between the one and the other the Greek prepositions Epi and Hypo were added to the names of the consonances in which the parts were to follow; for instance, where the reply was above the principal, it was said to be in the epidiatessaron, epidiapente, or epidiapason; when it was below, it was called hypodiattessaron, hypodiapente, hypodiapason;* adding in either case, where the number of parts required it, a farther direction: for an example of one of these kinds we have that celebrated composition of our countryman William Bird, to the words 'Non nobis Domine,' which in the manner of speaking above described would be called a canon of three parts, viz., in the hypodiattessaron et diapason, post tempus, and in the Musurgia, tom. I. page 389, is a canon of four parts in the hypodiapente, diapason, et hypodiapason cum diapente, composed by Emilio Rossi, chapel-master of Loretto, remarkable for the elegance of its con-texture, the resolution whereof is here inserted:

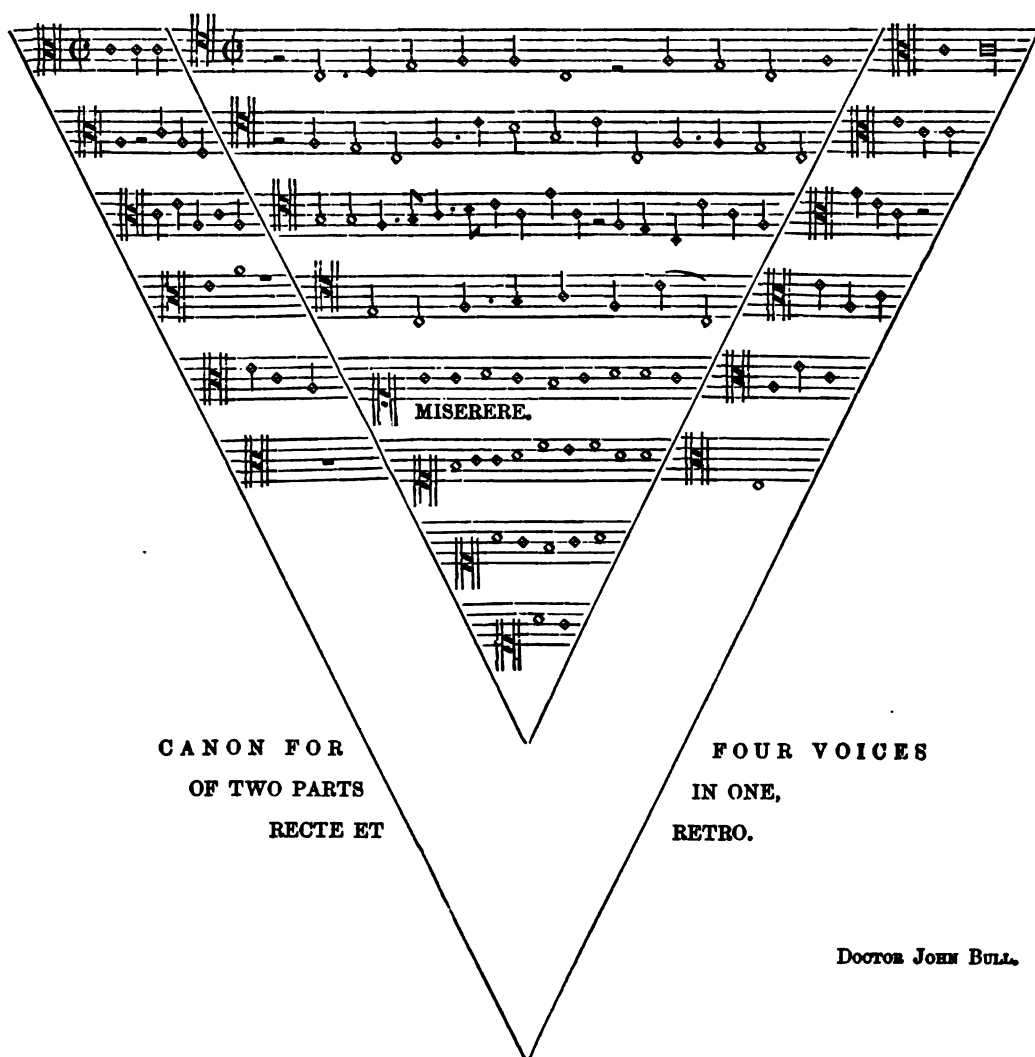
CANON
IN HYPODIAPENTE.

* These are the most general forms of canon, but Morley, pag. 172, says a canon may be made in any distance, comprehended within the reach of the voice.

EMILIO ROSSI.

CHAP. LXVII.

Soon after its invention farther improvements were made in this species of composition, by the contrivance of fugues, that sung both backward and forward, or, in musical phrase, recte et retro; and of others that sung per Arsin and Thesin, that is to say, so as that one part ascended while the other descended. Of the former kind the following canon of Dr. John Bull, with the resolution thereof in the present method of notation, is an example:—



MISERERE.

CANON FOR
OF TWO PARTS
RECTE ET

FOUR VOICES
IN ONE,
RETRO.

DOCTOR JOHN BULL.

RESOLUTION.



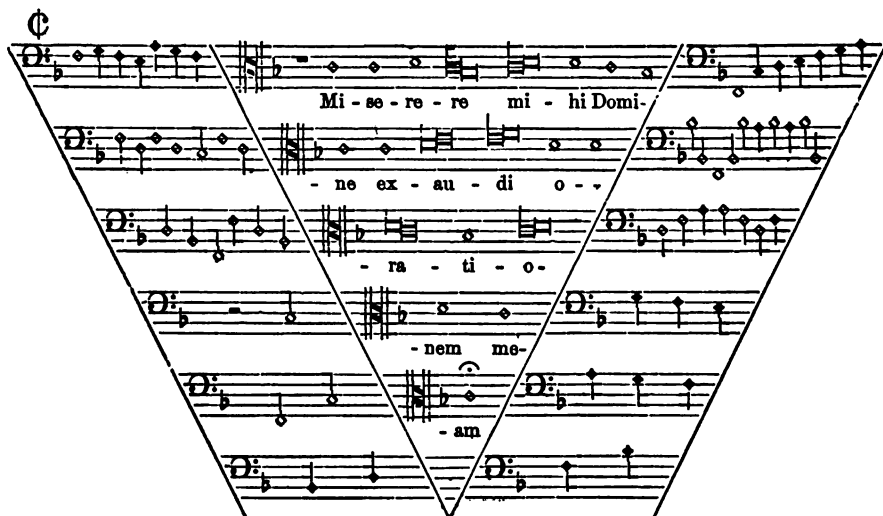
MISERERE.

Of fugue per Arsin et Thesin, or, as it is called by the Italians, per Muovimenti contrarii, this from the Istituzione Harmoniche of Zarlino, terza parte, cap. lv. pag. 277, may serve as a specimen :—

FUGA PER MUOVIMENTI CONTRARI.



Here follows a fugue of Dr. Bull on the same plain-song with that of his above given, of both kinds, viz., recte et retro, and also per arsin et thesin; the canon whereof, to shew the artificial construction of its parts, is in the manuscript whence it was taken exhibited in the form of a triangle, and immediately following it, is the resolution thereof in modern characters :—



CANON FOR
OF FOUR PARTS
ET RETRO, ET PER

FIVE VOICES
IN ONE, RECTE
ARSIN ET THESIN.

DOCTOR JOHN BULL.

RESOLUTION.

This and the former by the same author, in the manuscript from which they were taken, are given in a triangular form, with a view to exhibit the singularity of their contexture, and the mutual relation and various progressions of the several sounds; and that figure is here preserved in both instances: but lest this representation should appear too enigmatical, the resolution of each canon in score is above given.

Morley, in the second part of his Introduction, pag. 103, has given a fugue of Bird's composing, of two parts in one, *per Arsin et Thesin*, with the point reverted, note for note, of which he says, 'that whoever shall go about to make such another upon 'a common knowne plaine-song or hymne, shall 'find more difficultie than he looked for; and that 'although he shoulde assaie twentie several hymnes 'or plain-songs for finding of one to his purpose, 'he doubts if he should anie waie goe beyonde the 'excellencie of that which he speaks of, for which 'reason he has given it in this form:—

DUE PARTES IN UNA
PER ARSIN ET THESIN,
BIS REPETITE.



Butler is lavish in his commendations of this fugue; indeed his words are a sort of comment on it, and as they are calculated to point out and unfold its excellencies, they are here given from his *Principles of Music*, lib. I. cap. iii. sect. 4. in his own words:—

‘The fifth and last observation is, that all sorts of

* The several examples of canon by Dr. Bull and Bird, above given, are not in print, and it may therefore be expected that their authenticity should be ascertained: with respect to the former, they are taken from a very curious MS. formerly in the library of Dr. Pepusch, in an outer leaf whereof is written ‘Ex Dono Willi Theed;’ this Mr. Theed was many years a member of the academy of ancient music; and very well skilled in the science. The book contains, among many other compositions of the like nature, the above canons of Dr. Bull, and also that of Clemens Non Papa, with the several resolutions thereof in the form above inserted.

As to the examples ascribed to Bird, they are taken from a MS. also once part of Dr. Pepusch’s library. In the hand-writing of Mr. Galliard; the fugues upon *O Lux* and *Miserere* are written in canon with the usual sign for the parts to follow: the resolutions are clearly the studies of Mr. Galliard, who it seems thought himself warranted in the insertion of flat and sharp signatures in many instances, though no such appear in the canons themselves. Both these manuscripts are now in the collection of the author of this work.

It is necessary here to remark that these several exemplars of fugue and canon are adduced with a view solely to investigate and explain the nature of these intricate species of composition, for which purpose the resolutions alone in the latter instances will be thought sufficient.

‘fugues (reports and reverts of the same, and of divers points in the same, and divers canons, and in the same and divers parts) are sometimes most elegantly intermeddled, as in that inimitable lesson of Mr. Bird’s, containing two parts in one upon a plain-song, wherein the first part beginneth with a point, and then reverteth it note for note in a fourth or eleventh; and the second part first reverteth the point in the fourth as the first did, and then reporteth it in the unison; before the end whereof, the first part having rested three minims after his revert, singeth a second point, and reverteth it in the eighth; and the second first reverteth the point in a fourth, and then reporteth it in a fourth: lastly, the first singeth a third point, and reverteth it in the fifth, and then reporteth it in an unison, and so closeth with some annexed notes; and the second first reverteth it in a fifth, and then reporteth it in an unison, and so closeth with a second revert; where, to make up the full harmony, unto these three parts is added a fourth, which very musically toucheth still upon the points reported and reverted.

But here a distinction is to be noted between perpetual fugues, such as those above given, in which every note in the one part has its answer in the other part; and that other transitory kind of fugue, in which the point only, whatever it be, is repeated in the succeeding parts; in this case the intermediate notes are composed ad placitum, for which reason the former kind of fugue is termed by Zarlino and other Italian writers, *Fuga legata*, and the other *Fuga sciolta*, that is to say, strict or constrained, and free or licentious fugue.

The Italians also give to the leading part of a fugue and its replicate or answer, the appellations of *Guida* and *Consequenza*; Morley, and others after him, distinguish them by the names of principal and reply: and with the appearance of reason it is said that the notes in each should sol-fa alike; that is to say, the intervals in each part ought to be precisely the same with respect to the succession of the tones and semitones; nevertheless, this rule is not strictly adhered to, a spurious kind of fugue having, in the very infancy of this invention sprung up, known by the name of *Fuga in nomine*, as being to appearance and nominally only, fugue, and not that species of composition in the strict sense of musical language.

Zarlino and other Italian writers speak of a kind of fugue called *Contrapunto doppio*, double counterpoint, which supposes the notes in each part to be of equal time, but that the subject of the principal and the reply shall be different in respect of the point, being yet in harmony with each other: the exact opposition of note to note in this kind of composition was, soon after its invention, dispensed with, and the principal and its reply made to consist of notes of different lengths or times; after which it obtained the name of double descant, the terms descant and counterpoint being always used in opposition to each other. Sethus Calvisius includes both under the comprehensive name *Harmonia Gemina*; and to fugues of this kind, where a third point or

subject is introduced, he gives the name of *Tergemina*. Morley has given examples of each at the end of the second part of his Introduction.

From the foregoing explanation of the nature of canon it must appear to be a very elaborate species of musical composition, and in which perhaps, substance, that is to say, fine air and melody is made to give place to form; just as we see in those fanciful poetical conceits, acrostics, anagrams, chronograms, &c. where the sense and spirit of the composition is ever subservient to its form; but the comparison does not hold throughout, for the musical compositions above spoken of derive an advantage of a peculiar kind from those restraints to which they are subjected; for in the first place the harmony is thereby rendered more close, compact, and full; nor does this harmony arise merely from the concordance of sounds in the several parts, but each distinct part produces a succession of harmony in itself, the laws of fugue or canon being such as generally to exclude those dissonant intervals which take away from the sweetness or melody of the point. In the next place the ear is gratified by the successive repetition of the point of a fugue through all its parts; and the mind receives the same pleasure in tracing the exact resemblance of the several parts each to the other, as it does in comparing a picture or statue with its archetype; the truth of this observation must be apparent to those who are aware of the scholastic distinction of beauty into absolute and relative.

The general directions for singing of fugue when written in canon are such as these: Fuga in *tertia superiore post tempus*.—Fuga in *Hypodiapente, post tempus*.—Fuga 5 *vocum in tertia superiore, post tempus*.—Fuga in *Unisono post duo tempora, et per contrarium motum*. But many musicians have been less explicit, as choosing to give them an enigmatical form, and leaving it to the peruser to exercise his patience in the investigation of that harmony which might easily have been rendered obvious. Morley, pag. 173 of his Introduction, has given an enigmatical canon of *Iodocus Pratensis*; and he there refers to others in the Introductions of *Raselius* and *Sethus Calvisius*: he has also given a canon of his own invention in the figure of a cross, with its resolution; but there is one in that form infinitely more curious in a work entitled *El Mellopeo y Maestro*, written by *Pedro Cerone*, of *Bergamo*, master of the royal chapel of *Naples*, published in 1613.*

It now remains to speak of a species of fugue in the unison, wherein for particular reasons the strict rules of harmony are frequently dispensed with, namely, the catch or round, which *Butler*, after *Calvisius* thus defines: 'A catch is also a kind of fugue, when upon a certain rest the parts do follow one another round in the unison. In which concise harmony there is much variety of pleasing conceits, the composers whereof assume unto themselves a special licence of breaking *Priscian's* head, in unlawful taking of discords, and in special con-

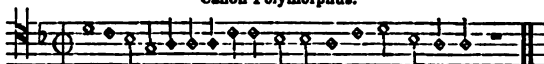
secutions of unisons and eighths, when they help to 'the melody of a part.'†

This, though the sentiment of both *Calvisius* and *Butler*, is by no means a true definition of a catch; and indeed the term itself seems to indicate a thing very different from that which they have described, for whence can come the appellation but from the verb *Catch*? yet is there nothing in the passage above-cited to this purpose. A catch, in the musical sense of the word, is a fugue in the unison, wherein, to humour some conceit in the words, the melody is broken, and the sense interrupted in one part, and caught again or supplied by another: an instance of this may be remarked in the well-known catch 'Let's 'lead good honest lives,' ascribed to *Purcell*, though in truth composed many years before his time, by *Cranford*, a singing-man of *St. Paul's*, to words of a very different import. See a collection of catches and rounds, entitled *Catch that Catch can*, or the *Musical Companion*, printed for old *John Playford*, *Lond.* 1677, oblong quarto; in this both the words and the music catch, as they do also in another elegant composition of this kind, 'Come here's the 'good health, &c,' by *Dr. Cæsar*, and 'Jack thou'rt 'a toper,' both printed by *Pearson* in 1710.

Butler refers to three examples of this kind of song in *Calvisius*; but the truth of the matter is, that it

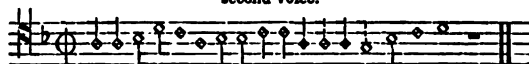
† To say the truth, notwithstanding the severe restrictions to which it is subject, canon does in many respects afford a great latitude for invention. *Kircher* relates, that in the writing of his *Musurgia*, more especially that part which treats of canon, he was assisted by *Pietro Francesco Valentini* of *Rome*, who gave him the following:—

Canon Polymorphus.

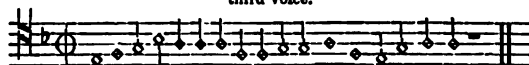


of which he thus speaks: *Musurg. Univ. tom. I. lib. V. cap. xix.* 'This wonderful canon contains ten times, one pause, and seventeen notes; it may sung by two, three, four, or five voices, more than two thousand ways; nay, by combining the parts, this variety may be infinitely extended. The second voice is retrograde to the first, the third is inverse of the first, or proceeds by contrary motion to it; the fourth is retrograde to the third, as may be seen hereunder:—

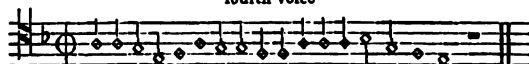
second voice.



third voice.



fourth voice



Kircher adds that the same musician proposed another canon, which he called *Nodus Salomonis*, which may be sung by ninety-six voices, namely twenty-four in each part, treble, counter-tenor, tenor, and bass, and yet there are only four notes in the canon; but it is to be observed, that to introduce a regular variety of harmony, some of the ninety-six voices are to sing all longs, some all breves, some semibreves, some minims, some semi-minims. See the relation at length in the *Musurgia*, tom. I. pag. 403, et seq., with the disposition of the several parts in their order.

Kircher, in the *Musurgia*, tom. I. page 408, says he afterwards found out that the same canon might be sung by five hundred and twelve voices, or, which is the same thing, distributed into one hundred and twenty-eight choirs; and afterwards proceeds to shew how it may be sung by twelve million two hundred thousand voices, nay, by an infinite number; and then says, in *Corollary* iii. that this place of the *Apocalypse* is made clear, viz., chap. xiv. 'And I heard the voice of harpers harping 'with their harps, and they sung as it were a new song, &c., and no man 'could learn that song but the one hundred and forty-four thousand 'which were redeemed from the earth.' *Kircher* asserts that this passage in scripture may be interpreted literally, and then shews that the canon above described may be so disposed as to be sung by one hundred and forty-four thousand voices. *Musurg. tom. I. pag. 414.*

* In this voluminous work are contained a great number of musical conceits, which whoever has a mind to divert himself with them, will find in the twenty-second book, entitled 'Que es los enigmas musicallas.'

SOL FA MI RE UT.

if my La - dy love me well, Lord so Ro - bin lowres.

Thomas be her boote, She met with Kate of Malmes-bu-ry, why weep'st thou ma - ple?

- bout. O Fry-er, how fares thy ban-de-low, ban-de-low, Fry-er, how fares thy ban - de-low, ban - de-low?

CANON IN THE UNISON.

A 5 Voc.

COME, fol - - low me mer - ri - ry my

Take heed of time, tune, and ear, time, tune, and ear,

Mal - kin was a coun - try maid, a coun - try maid, trick and trim, trick and trim

Hey hoo, have with you now to West - min - ster, but before you come

A - - dieu, you dain - ty Dame, go whi - ther you will for

mates, let all a - - gree, and make no faults.

and then with-out all doubt we need not fear to sing this catch through - out.

as she might be, she would needs to the court She said, to sell milk and fir - men - ty.

there, be - - cause the way is far, some pret-ty talk let's hear.

me, you are the ve - ry same I took you for to be.

CANON IN THE UNISON.

A 5 Voc.

HOW should we sing well and not be wea - ry,

and not be wea - - ry, Since we lack mo - ney to

make us mer - - ry, to make us mer - ry,

Since we lack mo - ney to make us mer - ry,

Since we lack mo - ney to make us mer - ry.

x

Of the several examples of fugues and rounds, or to adopt the common mode of speech, of fugues on a plain-song, and canons in the unison, above given, it is necessary to remark that the former are adduced, as being some of the most ancient specimens of that strict kind of composition perhaps any where to be met with: farther than this, they are studies, perhaps juvenile ones, of Bird, and are alluded to by Morley in his Introduction. And here it is to be noted, that the plain-song of the fugue in page 295, differs from that of the others, and from its serpentine figure is said to be 'per naturam synophe.' It seems that Mr. Galliard had some trouble to resolve or render these several compositions in score, for in his manu-

script he remarks that they are very difficult and curious: and it is more than conjectured that many of the grave and acute signatures that occur in some of them, were inserted by him with some degree of hesitation; it was nevertheless thought proper to retain them, even under a doubt of their propriety, rather than attempt to correct the studies of so excellent a judge of harmony. As to the rounds or canons in the unison that follow, they are exemplars of that species of vocal harmony which they are cited to explain: they are of the sixteenth century, and we know of no compositions of the kind more ancient, except the canon given in book V. chap. xlv. of the present work.

BOOK VIII. CHAP. LXVIII.

HAVING in a regular course of succession traced the several improvements in music, including therein the reformation of the scale by Guido, and the invention of counterpoint, and of the canto figurato, with all the various modifications of fugue and canon, it remains to speak of the succeeding writers in their order.

ALANIUS VARENIUS, of Montaubon, in Tholouse, about the year 1503, wrote Dialogues, some of which treat of the science of harmony and its elements.

LUDOVICUS CÆLIUS RHODIGINUS flourished about the year 1510; he wrote nothing professedly on the subject of music, yet in his work *De Antiquarum Lectionem*, in thirty books, are interspersed many things relating thereto, particularly in lib. V. cap. 23, 25, 26. Kircher, in the *Musurgia*, tom. I. pag. 27, cites from him a relation to the following effect, viz.: That he, Cælius Rhodiginus, being at Rome, saw a parrot, which had been purchased by Cardinal Ascanius, at the price of an hundred golden crowns, which parrot did most articulately, and as a man would, repeat in words the Creed of the Christian faith. Cælius Rhodiginus was tutor to Julius Cæsar Scaliger, and died in 1525, of grief, as it is said, for the fate of the battle of Pavia, in which his patron Francis the First, from whom he had great expectations, was taken prisoner. He is taxed with having borrowed some things from Erasmus, without making the usual acknowledgments.

GREGORIUS REISCHIUS, of Friburg, was the author of a work entitled *Margarita Philosophica*,* *i. e.* the Philosophical Pearl, a work comprehending not only a distinct and separate discourse on each of the seven liberal sciences, in which, by the way, judicial astrology is considered as a branch of astronomy, but a treatise on physics, or natural philosophy, metaphysics, and ethics, in all twelve books; that on music is taken chiefly from Boetius, yet it seems to owe some part of its merit to the improvements of Franchinus. The *Margarita Philosophica* is a thick quarto; it was printed at Basil in 1517, and in France six years after; the latter edition was revised and corrected by Orontius Fineus, of the college of Navarre.†

* This book, the *Margarita Philosophica*, is frequently mentioned in a work entitled *Il Musico Testore*, by Zaccaria Tevo, printed at Venice in 1706, in which many passages are cited from it verbatim.

† Bayle ORONCE FINE.

JOHANNES COCHLEUS, of Nuremberg, was famous about the year 1525, for his Polemical writings. He was the author of *Rudimenta Musicæ et Geometria*, printed at Nuremberg, and the tutor of Glareanus, as the latter mentions in his *Dodecachordon*, a doctor in divinity, and dean of the church of Francfort on the Maine. He was born in 1503, but the time of his death is uncertain, some writers making it in 1552, and others sooner. From his great reputation, as a scholar and divine, it is more than probable that he was one of the learned foreigners consulted touching the divorce of Henry the Eighth, for the name of Johannes Cochleus occurs in the list of them. Peter Aron, in his *Toscanello*, celebrates him by the title of *Phonascus* of Nuremberg.

LUDOVICUS FOLIANUS, of Modena, published at Venice, in 1529, in folio, a book intitled *Musica Theoretica*; it is written in Latin, and divided into three sections, the first contains an investigation of those proportions of greater and lesser inequality necessary to be understood by musicians; the second treats of the consonances, where, by the way, it is to be observed that the author discriminates with remarkable accuracy between the greater and lesser tone; and by insisting, as he does in this section *De Utilitate Toni majoris et minoris*, plainly discovers that he was not a Pythagorean, which is much to be wondered at, seeing that the substance of his book appears for the most part to have been taken from Boetius, who all men know was a strict adherer to the doctrines of Pythagoras. It is therefore said, and with great appearance of reason, that it is to Folianus that the introduction into practice of the intense or syntonous diatonic, in preference to the ditonic diatonic, is to be attributed. This particular will appear to be more worthy of remark, when it is known, that about the middle of the sixteenth century it became a matter of controversy which of those two species of the diatonic genus was best accommodated to practice. Zarlino contended for the intense or syntonous diatonic of Ptolemy, or rather Didymus, for he it was that first distinguished between the greater and lesser tone. Vincentio Galilei, on the other hand, preferred that division of Aristoxenus, which, though irrational according to the judgment of the ear, gave to the tetrachord two tones and a half. In the course of

the dispute, which was conducted with great warmth on both sides, Galilei takes great pains to inform his reader that Zarlino was not the first that discovered the supposed excellence of that division which he preferred, for that Ludovico Fogliano, sixty or seventy years before, had done the same;* and in the table or index to his book, article Lodovico Fogliano, which contains a summary of his arguments on this head, he speaks thus: ‘Lodovico Fogliano fu il primo che considerasse che il diatonico che si canta hoggi, ‘non era il ditoneo, ma il syntono;’ which assertion contains a solution of a doubt which Dr. Wallis en-

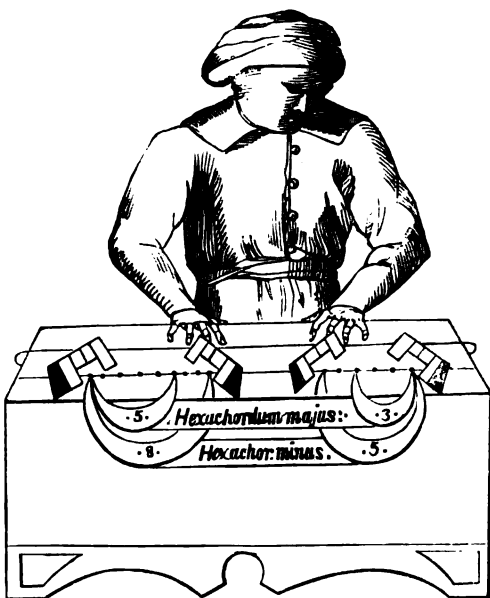
* Dial. della Musica antica e moderna, pag. 112.

tertained, namely, whether Zarlino or some more ancient writer first introduced the syntonous or intense diatonic into practice.†

The third section of Folianus’s book is principally on the division of the Monochord, in which he undertakes to shew the necessity of setting off D, and also of Bb twice.

Many of the divisions, particularly in the first chapter of the second section, are exemplified by cuts, which as they shew the method of using the Monochord, with the ratios of the consonances, and are in other respects curious, are here inserted.

† Append. de Veter. Harmon. quarto, pag. 318.





JOHANNES FROCHIIUS, a doctor of divinity, and prior of the Carmelites at Augsburg, was the author of *Opusculum Rerum Musicalium*, printed at Strasburg in 1535, a thin folio, and a very methodical and concise book, but it contains little that can be said to be original.

ANDREAS ORNITHOPARCUS, a master of arts in the university of Meyning, was the author of a very learned and instructive treatise on music, intitled *Micrologus*, printed at Cologne in 1535, in oblong quarto. It is written in Latin, and was translated into English by our countryman John Douland, the celebrated lutenist, and published by him in 1609. This work contains the substance of a course of lectures which Ornithoparcus had publicly read in the universities of Tubingen, Heidelberg, and Mentz. It is divided into four books, the contents whereof are as follow.

The first book is dedicated to the governors of the state of Lunenburg. The first three chapters contain a general division of music into mundane, humane, and instrumental, according to Boetius, which the author again divides into organical, harmonical, speculative, active, mensural, and plain music, and also the rudiments of singing by the hexachords, according to the introductory or scale of Guido. In his explanation whereof he relates that the Ambrosians distinguished the stations of the cliffs by lines of different colours, that is to say, they gave to F FA UT a red, to C SOL FA UT a blue, and to bb a sky-coloured line; but that the Gregorians, as he calls them, whom the church of Rome follow, mark all the lines with

* That the use of the tetrachord synemmenon, or rather of its characteristic b round, was to avoid the tritonus or superfluous fourth between F FA UT and b MI, must appear upon reflection, but this author has made it apparent in the following, which is the fourth of his rules for ficta music.

one colour, and describe each of the keys by its first letter, or some character derived from it.

In the fourth chapter he limits the number of tones to eight; and, speaking of the ambit or compass of each, says there are granted but ten notes wherein each tone may have his course; and for this assertion he cites the authority of St. Bernard, but adds, that the licentious ranging of modern musicians hath added an eleventh to each.

The fifth and sixth chapters contain the rules for solfaing by the hexachords, and for the mutations.

In the seventh chapter he speaks of the consonant and dissonant intervals, and cites Ambrosius Nolanus and Erasmus to shew, that as the diadiapason is the natural compass of man's voice, all music should be confined to that interval.

In the eighth and ninth chapters he teaches to divide, and recommends the use of the Monochord, by the help whereof he says any one may by himself learn any song, though never so weighty.

Chapter X. is intitled *De Musica ficta*, which he thus defines: 'Fained musicke is that which the Greeks call Synemmenon, a song made beyond the regular compass of the scale; or it is a song which is full of conjunctions.'

By these conjunctions are to be understood conjunctions of the natural and molle hexachords by the chord Synemmenon, characterized by b; and in this chapter are discernible the rudiments of transposition, a practice which seems to have been originally suggested by that of substituting the round, in the place of the square b, from which station it was first removed into the place of E LA MI, and has since been made to occupy various other situations; * as has also the acute signature ♯, which although at first invented to perfect the interval between H MI and F FA UT, which is a semidiapente or imperfect fifth, it is well known is now made to occupy the place of G SOL RE UT, C SOL FA UT, and other chords.

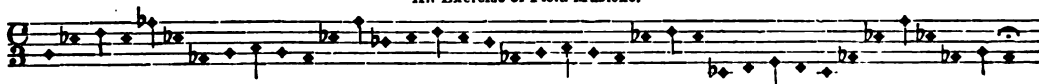
The eleventh chapter treats of transposition, which the author says is twofold, that is to say, of the song and of the key, but in truth both are transpositions of the song, which may be transposed either by an actual removal of the notes to some other line or space than that in which they stand, or by the removal of the cliff to some other line, thereby giving by elevation or depression to each note a different power.

The ecclesiastical tones are the subject of the twelfth and thirteenth chapters of the first book: in these are contained rules for the intonation of the Psalms, in which the author takes occasion to cite a treatise of Pontifex, i. e. pope John XXII., who it seems wrote on music, and an author named Michael Galliculo de Muris, a most learned man, author of certain rules of the true order of singing.

In treating of the tones Ornithoparcus follows for

'Marking FA in b FA H MI, or in any other place, if the song from that shall make an immediate rising to a fourth, a fifth, or an eighth, even there FA must necessarily be marked to eschew a tritone, a semidiapente, or a semidiapason, and in usual and forbidden moods, as appeareth in the example underwritten:—

An Exercise of Ficta Musicke.



the most part St. Bernard and Franchinus; his formula of the eight tones, as also of the Peregrine or wandering tone, differs but very little from that of Franchinus in his *Practica Musicae*, herein before exhibited.

In the thirteenth and last chapter of this book the author shews that divers men are delighted with divers modes, an observation that Guido had made before in the thirteenth chapter of his *Micrologus*, and to this purpose he says: 'Some are delighted with the crabbed and courtly wandering of the first tone; others do affect the hoarse gravity of the second; others take pleasure in the severe, and as it were disdainful stalking of the third; others are drawn with the flattering sound of the fourth; others are moved with the modest wantonness of the fifth; others are led with the lamenting voice of the sixth; others do willingly hear the warlike leapings of the seventh; others do love the decent, and as it were maternal-like carriage of the eighth.'

The second book is dedicated to the author's worthy and kind friend George Brachius, a most skilful musician, and chief doctor of the Duke of Wittenberg his chappell.

In the second chapter of this book the author explains the nature of mensural music, and the figures used therein: these he says were anciently five, but that those of after ages have drawn out others for quickness sake; those described by him are eight in number, viz., the large, long, breve, semibreve, minim, crotchet, quaver, and semiquaver; but it is worthy of notice that he gives to the semibreve two forms, the one resembling a lozenge, agreeable to the character of the semibreve now or lately in use, the other that of an equilateral triangle or half lozenge.

The third chapter contains an explanation of the ligatures from Franchinus, but much too concise to be intelligible.

The fourth chapter treats of mood, time, and prolation, of which three terms the following is his definition: 'The degrees of music, by which we know the value of the principal figures, are three, to wit, mood, time, and prolation. Neither doth any of them deale upon all notes, but each onely with certaine notes that belong to each. As mood dealeth with larges and longs, time with breifes, prolation with semibreifes.' This general definition is followed by one more particular, which is here given in the translator's own words:—

'A Moode (as Franchinus saith in the second booke, cap. 7. of his *Pract.*) is the measure of longs in larges, or of breifes in longs. Or it is the beginning of the quantitie of larges and longs, measuring them either by the number of two, or the number of three.

'Time is a breefe which containes in it two or three semibreifes. Or it is the measuring of two or three semibreifes in one breefe. And it is twofold, to wit, perfect: and this is a breefe measured with three semibreifes. Whose signe is the number of three joined with a circle or a semicircle, or a perfect circle set without a number, thus O 3. C 3. O.

'The imperfect is wherein a breefe is measured only by two semibreifes. Which is knowne by the number of two joynd with a perfect circle, or a semicircle, or a semicircle without a number, thus O 2. C 2.

'Wherefore prolation is the essentiall quantitie of semibreifes; or it is the setting of two or three minims against one semibreefe; and it is twofold, to wit, the greater (which is a semibreefe measured by three minims, or the comprehending of three minims in one semibreefe) whose signe is a point inclosed in a signe thus, \odot \odot . The lesser prolation is a semibreefe measured with two minims onely, whose signe is the absence of a pricke. For Franchinus saith, they carry with them the imperfecting of the figure when the signes are wanting.'

In the course of this explanation the author takes occasion to mention the extrinsical and intrinsical signs in mensural music; the former he says are the circle, the number, and the point. As to the circle, when entire it originally denoted perfection, as it was called, or a progression by three, or in what we now call triple time. When the circle was discontinued, or cut through by a perpendicular or oblique stroke, it signified imperfection, or a progression by two, or, as we should say, in duple time; when the circle had a point in the centre it signified a quicker progression in the proportions of perfect and imperfect, according as the circle was either entire or mutilated, as above. As to the figures 3 and 2, used as extrinsic signs, they seem intended only to distinguish the greater mood, which gave three longs to the large, from the lesser, which gave three breves to the long; but the propriety of this distinction is not easy to be discovered. As these characters are now out of use, and are supplied by others of modern invention, it is not necessary to be very inquisitive about them;* it is however very certain that the musicians, from the beginning of the sixteenth century, downwards, seem to betray an universal ignorance of their original use and intention; and since the commencement of that period, we nowhere find the circle used to denote perfect or triple time; on the contrary, the character for the several species of it are intended to bespeak the relation which the intended progression in triple time bears to common or imperfect time; for instance $\frac{3}{2}$ is a progression by three of these notes, two whereof would make a bar or measure of duple time, that is to say, minims; $\frac{3}{4}$ and $\frac{3}{8}$ are progressions in triple time by crotchets and quavers; and this observation will

* It may not be improper here to take notice, that notwithstanding the complaints of Morley of the confusion in which the *Cantus Mensuralis* was involved, and his absolute despair of restoring the characters anciently used in it, an author, who lived a few years after him, Thomas Ravenscroft, a bachelor of music, published a book with this title, viz.: 'A breefe discourse of the true (but neglected) use of charactering the degrees by their perfection, imperfection, and diminution in mensurable musike, against the common practice and custom of these times. Examples whereof are exprest in the harmony of 4 voyces, concerning the pleasure of 5 usual recreations, 1 hunting, 2 hawking, 3 dauncing, 4 drinking, 5 enamouring.' London, 1614, quarto.

The author has discovered, as well in the apology and the preface to this book, as in the discourse itself, a great share of musical erudition; but the arguments severally contained in them failed to convince the world that the revival of an obsolete practice, which from its intricacy and inutilty had insensibly grown into disuse, could in any way tend to the perfection of the science; and experience has shewn that that method of charactering the degrees, which, as he contends is the only true one, is not essential in the notation of music.

serve to explain various other signatures not here mentioned. As to these other numbers $\frac{3}{4}$, $\frac{1}{2}$, the denominator in each having a duple ratio, they are clearly the characteristics of common time; but though the entire circle is no longer used as a characteristic of time, yet the discontinued or mutilated circle is in daily practice. Some ignorant writers on music, from its resemblance to the letter C, suppose to be the initial of the word Common; adding, that where a perpendicular stroke is drawn through it, it signifies a quick, and where it is inverted a still quicker succession of notes.* *But this appropriation of the epithet common to duple time is unwarrantable, for in truth duple time is no more common than triple, the one occurring as often in musical compositions as the other.*

The intrinsic signs used in music are no other than the rests which correspond with the measures of notes, and that alteration of the value of notes, which consists in a variety of colour, as black full, black void, red full, and red void, mentioned by Morley and other writers.

The sixth chapter treats of Tact, thus defined by the author: 'Tact is a successive motion in singing, directing the equality of the measure. Or it is a certain motion made by the hand of the chief singer according to the nature of the marks, which motion directs a song according to measure.'

'Tact is threefold, the greater, the lesser, and the proportionate; the greater is a measure made by a slow, and as it were reciprocal motion; the writers call this tact the whole or total tact; and because it is the true tact of all songs, it comprehends in his motion a semibreve not diminished, or a breve diminished, in a duple. The lesser tact is the half of the greater, which they call a semi-tact, because it measures by its motion a semibreve diminished in a duple; this is allowed of only by the unlearned. The proportionate is that whereby three semibreves are uttered against one, as in a triple, or against two, as in a sesquialtera.'

In the seventh chapter the author takes occasion to define the word Canon in these words:—

'A canon is an imaginary rule, drawing that part of the song which is not set downe, out of that part which is set downe. Or it is a rule which doth wittily discover the secrets of a song. Now we use canons either to shew art, or to make shorter worke, or to try others cunning.'

From this, which is an excellent definition of the term, we may learn that it is very improperly applied to that kind of perpetual fugue which is generally understood by the word Canon; for it is a certain compendious rule for writing down a composition of that kind on a single stave, and for singing it accordingly; and hence it seems to be a solecism to say a canon in score; for when once the composition is scored, the rule or canon for singing it does not apply to it.

* This supposition seems in some measure to be warranted by the practice of Corelli, who throughout his works has characterized those movements, where the crotchets are in effect quavers, by a semicircle, with a perpendicular stroke drawn through it; and Geminiani has done the same. See the sonatas of Corelli, passim, and the last movement in his ninth solo, and the second and third operas of Geminiani, passim, in the edition published by himself in score.

As in the former chapter the author had mentioned augmentation of the value of notes by a point in the signature, and other marks or directions, in this, which is the eighth of the second book, he speaks of diminution, which he also calls Syncopation, and divides into virgular, the sign whereof is the circle mutilated, or having a perpendicular or oblique stroke, as before is mentioned; and numeral, signified by figures. In this chapter the author takes occasion to mention a man living in his time, and hired to be organist in the castle of Prague, of whom, to use his own words, he thus speaks: 'Who though he knew not, that I may conceal his greater faults, how to distinguish a perfect time from an imperfect, yet gives out publicly that he is writing the very depth of music, and is not ashamed to say that Franchinus (a most famous writer, one whom he never so much as tasted of) is not worth the reading, but fit to be scoffed at and scorned by him. Foolish, bragging, ridiculous rashness, grosse madness which therefore only doth snarle at the learned, because it knows not the means how to emulate it. I pray God the wolfe may fall into the toiles, and hereafter commit no more such outrage, nor like the crow brag of borrowed feathers, for he must need be counted a dotard that prescribes that to others the elements whereof himself never saw.'

The ninth, tenth, and eleventh chapters treat of rests, and of the alteration of notes by the addition of a point; and of imperfection by the note, the rest, and the colour, that is to say, the subtraction of a third part from a given note agreeable to the rule in mensural music, that perfection consists in a ternary, and imperfection in a binary progression of time.

The twelfth chapter speaks of a kind of alteration by a secondary singing of a note for the perfecting of the number 3. These four chapters refer to a method of notation which is now happily superseded by the rejection of ligatures and the insertion of bars.

The subject of the thirteenth chapter is proportion, in the explanation whereof he follows Euclid, Boetius, and Franchinus. Speaking of proportion in general, he says it is either of equality or inequality; but that because the dissimilitude and not the similitude of voice doth make harmony, so music considers only the proportion of inequality. And this he says is two-fold, to wit, the proportion of the greater and of the lesser inequality: the proportion of the greater inequality is the relation of the greater number to the less, as 4 to 2, 6 to 3; the proportion of the lesser inequality is contrarily the comparison of a less number to the greater, as of 2 to 4, of 3 to 6.

Of the proportions of the greater inequality, he says, as indeed do all the writers on the subject, that it is of five kinds, namely, multiplex, superparticular, superpartiens, multiplex superparticular, and multiplex superpartiens, the latter two compounded of the former three, which are simple.

To these he says are opposed five other kinds of proportions, to wit, those of the lesser inequality, having the same names with those of the greater inequality, save that they follow the preposition sub-multiplex, &c.

CHAP. LXIX.

As the subject of proportion has already been treated of, this brief account of the author's sentiments concerning it may suffice in this place, the rather as it is a subject, about which not only arithmeticians and musicians, but all mathematicians are agreed. But under this head of proportion there is one observation touching duple proportion, which will be best given in his own words. 'Duple proportion, the first kind of the multiplex, is when the greater number, being in relation with the less, doth comprehend it in itselfe twice, as 4 to 2, 8 to 4; but musically, when two notes are uttered against one, which is like them both in nature and kind. The signe of this some say is the number 2; others because proportion is a relation not of one thing but of two, affirm that one number is to be set under another thus $\frac{2}{1}$ $\frac{3}{2}$ $\frac{4}{3}$, and make no doubt but in all the rest this order is to be kept.

'I would not have you ignorant that the duple proportion, and all the other of the multiplex kind, are marked by certain canons, saying thus, Decrescit in duplo, in triplo, and so forth. Which thing, because it is done either to encrease men's diligence, or to try their cunning, we mislike not. There be that consider the whole proportion in figures, which are turned to the left hand-ward, with signs and crookes, saying that this C is the duple of this O, and this \downarrow of \uparrow ; and in rests, that this r is the duple of this τ . I think only upon this reason that Franchinus, Pract. lib. II. cap. iv. saith that the right side is greater and perfecter than the left, and the left weaker than the right, against which opinion neither myself am. For Valerius Probus, a most learned grammarian, in his interpretation of the Roman letters, saith that the letter C, which hath the form of a semicircle, signifies Caius, the man; and being turned, signifies Caia, the woman; and Fabius Quintilianus, in approving of Probus his opinion, saith Caius is shewed by the letter C, which being turned signifies a woman; and being that men are more perfect than women, the perfection of the one is declared by turning the semicircle to the right hand, and the weakness of the other by turning it to the left.*

♥ Book III. is dedicated to Philip Surus of Miltenburg, 'a sharp-witted man, a master of art, and a most cunning musician, chapel-master to the count palatine the duke of Bavaria.'

The first chapter contains the praise of accent, which is delivered in the following fanciful allegory.

'Accent hath great affinity with Concent, for they be brothers, because Sonus or Sound (the king of

'ecclesiastical harmony) is father to them both, and begat the one upon Grammar, the other upon Music; whom after the father had seen to be of excellent gifts both of body and wit, and the one not to yeeld to the other is any kind of knowledge; and further, that himselfe (now growing in yeeres) could not live long, he began to think which he should leave his kingdom unto, beholding some time the one, some time the other, and the fashions of both. The Accent was elder by yeares, grave, eloquent, but severe, therefore to the people less pleasing. The Concent was merry, frolicke, lively, acceptable to all, desiring more to be loved than to be feared, by which he easily wonne unto him all men's minds, which the father noting, was daily more and more troubled in making his choyce, for the Accent was more frugal, the other more pleasing to the people. Appointing therefore a certaine day, and calling together the peers of his realme, to wit, singers, poets, orators, morall philosophers, besides ecclesiastical governors, which in that function held place next to the king; before these king Sonus is said to have made this oration: "My noble peers, which have undergone many dangers of warre by land and sea, and yet by my conduct have carried the prize throughout the whole world; behold the whole world is under our rule; wee have no enemy, all things may goe prosperously with you, only upon me death encreaseth, and life fadeth; my body is weakned with labor, my soul consumed with care, I expect nothing sooner than death. Wherefore I purpose to appoint one of my sonnes lord over you, him I say whom you shall by your common voyces choose, that he may defend this kingdome, which hath been purchased with your blood, from the wrong and invasion of our enemies."

'When he had thus said, the nobles began to consult, and by companies to handle concerning the point of the common safety, yet to disagree, and some to choose the one, some the other, for the orators and poets would have the Accent, the musicians and the moralists chose the Concent. But the papal prelates, who had the royalties in their hands, looking more deeply into the matter, enacted that neither of them should be refused, but that the kingdome should be divided betwixt them, whose opinion the king allowed, and so divided the kingdome, that Concentus might be chiefe ruler over all things that are to be sung (as hymnes, sequences, antiphones, responsories, introitus, tropes, and the like), and Accent over all things which are read, as gospels, lectures, epistles, orations, prophesies; for the function of the papal kingdom are not duely performed without Concent: so these matters being settled, each part departed with their king, concluding that both Concent and Accent should be especially honoured by those ecclesiasticall persons. Which thing Leo the Tenth, and Maximilian the most famous Roman emperor, both chiefe lights of good arts, and especially of musicke, did by general consent of the fathers and princes, approve, endowe with privileges, and condemned all gainsayers as guilty of high treason, the one for their bodily, the other for

* Lib. II. cap. xlii.

This passage is not to be understood unless the adjectives right and left are taken in the sense in which the terms dexter and sinister are used by the heralds in the blazoning of coat-armour, in the bearing whereof the dexter is opposed to the left side of the spectator.

The above observation of the author seems to suggest a reason for a practice in writing country-dances, which it would otherwise be difficult to account for, namely, that of distinguishing the men and women by

these characters ○○○○, which are evidently founded in the ideas

of perfection and imperfection above alluded to, though signified by an entire and a mutilated figure; the circle, which is a perfect figure, denoting the man, and the semicircle, which is imperfect, the woman.

'their spiritual life. Hence was it that I marking how many of those priests which (by the leave of the learned) I will say doe reade those things they have to read so wildly, so monstrously, so faultily, that they doe not onely hinder the devotion of the faithful, but also even provoke them to laughter and scorning with their ill reading, resolved after the doctrine of concent, to explaine the rules of accent, inasmuch as it belongeth to a musitian, that together with concent accent might also, as true heire in this ecclesiastical kingdome be established. Desiring that the praise of the highest king, to whom all honour and reverence is due, might duely be performed.'

Accent, as this author explains it, belongs to churchmen, and is a melody pronouncing regularly the syllables of any word, according as the natural accent of them requires.

According to the rules laid down by him, it seems that in the reading the holy scriptures the ancient practice was to utter the words with an uniform tone of voice, with scarce any inflexion of it at all; which manner of reading, at least of the prayers, is at this day observed even in protestant churches. Nevertheless he directs that the final syllable, whatever it be, should be uttered in a note, sometimes a fourth, and at others a fifth lower than the ordinary intonation of the preceding syllables, except in the case of interrogatory clauses, when the tone of the final syllable is to be elevated; and to this he adds a few other exceptions. It seems by this author that there was a method of accenting the epistles, the gospels, and the prophecies, concerning which last he speaks in these words: 'There are two ways for accenting prophecies, for some are read, after the manner of epistles, as on the feast daies of our Lady, the Epiphany, Christmas, and the like, and those keep the accent of epistles; some are sung according to the manner of morning lessons, as in Christ's night, and in the Ember fasts, and these keep the accent of those lessons. But I would not have you ignorant that in accenting, oftentimes the manner and custome of the country and place is kept, as in the great church of Magdeburg; Tu autem Domine is read with the middle syllable long, by reason of the custome of that church; whereas other nations doe make it short according to the rule. Therefore let the reader pardon me if our writings doe sometime contrary the diocese wherein they live. Which though it be in some few things, yet in the most they agree. For I was drawne by my own experience, not by any precepts, to write this booke. And if I may speake without vain-glory, for that cause have I seen many parts of the world, and in them divers churches, both metropolitane and cathedral, not without great impeachment of my state, that thereby I might profit those that shall live after me. In which travaile of mine I have seen the five kingdomes of Pannonia, Sarmatia, Boemia, Denmark, and of both the Germanies, 63 diocesses, cities 340, infinit fashions of divers people, besides sayled over the two seas, to wit, the Balticke, and the great ocean, not to heape riches, but increase

'my knowledge. All which I would have thus taken that the reader may know that this booke is more out of my experience than any precepts.'

The fourth book is dedicated 'to the worthy and industrious master Arnold Schlick, a most exquisite musician, organist to the count Palatine,' and declares the principles of counterpoint: to this end the author enumerates the concords and discords; and, contrary to the sentiments of the more learned among musicians, reckons the diatessaron in the latter class. Of the concords he says, 'Some be simple or primarie, as the unison, third, fifth, and sixth; others are repeated or secondary, and are equisonous with their primitives, as proceeding of a duple dimension; for an eighth doth agree in sound with an unison, a tenth with a third, a twelfth with a fifth, and a thirteenth with a sixth; others are tripled, to wit, a fifteenth, which is equal to the sound of an unison and an eighth; a seventeenth, which is equal to a third and a tenth; and a nineteenth, which is equal to a fifth and a twelfth; a twentieth, which is equal to a sixth and a thirteenth, and so forth. Of concords also, some be perfect, some imperfect; the perfect are those, which being grounded upon certain proportions, are to be proved by the help of numbers; the imperfect, as not being probable, yet placed among the perfects, make an unison sound.'

Touching the fourth, he says, 'It may be used as a concord in two cases; first, when being shut betwixt two eighths it hath a fifth below, because if the fifth be above, the concord is of no force, by that reason of Aristotle, whereby in his problems he shews that the deeper discordant sounds are more perceived than the higher. Secondly, when the tenor and meane do go by one or more sixths, then that voice which is middling shall always keep a fourth under the cantus, and a third above the tenor.'

Speaking of the parts of a song in the fifth chapter, he says, 'They are many, to wit, the treble, tenor, high tenor, melody, concordant, vagrant, contratenor, base, yea and more than these.' Of the discantus he says in general 'That it is a song made of divers voyces, for it is called Discantus, quasi diversus cantus, that is as it were another song, but we, because Discantus is a part of a song severed from the rest, will describe it thus, Discantus is the uppermost part of each song, or it is an harmony to be song with a child's voyce.' Of the other parts he speaks thus: 'A tenor is the middle voyce of each song; or, as Gafforus writes, lib. III. cap. v. it is the foundation to the relation of every song, so called à tenendo, of holding, because it doth hold the consonance of all the parts in itselfe in some respect.' The Bassus, or rather Basis, is the lowest part of each song, or it is an harmony to be sung with a deepe voice, which is called Baritonus, a vari, which is low, by changing V into B, because it holdeth the lower part of the song. The high tenor is the uppermost part save one of a song, or it is the grace

* Ornithoparcus has not distinguished with sufficient clearness between the perfect and imperfect concords, though the reason of the distinction is properly assigned by him; the imperfect concords are the third and sixth, with their replicates.

'of the base, for most commonly it graceth the base, making a double concord with it. The other parts every student may describe by himselfe.'

The rules or special precepts of counterpoint laid down by this author, are so very limited and mechanical, that at this time of day, when the laws of harmony have been extended, and the number of allowable combinations so multiplied as to afford ample scope for the most inventive genius, they can hardly be thought of any use.

The eighth chapter has this title 'Of the divers fashions of singing, and of the ten precepts for singing,' and is here given in the words of the translator.

'Every man lives after his owne humour, neither are all men governed by the same lawes; and divers nations have divers fashions, and differ in habite, diet, studies, speech, and song. Hence is it that the English do carroll; the French sing; the Spaniards weepe; the Italians which dwell about the coasts of Janua caper with their voyces, the other barke; but the Germanes, which I am ashamed to utter, doe howle like wolves. Now because it is better to breake friendship than to determine any thing against truth, I am forced by truth to say that which the love of my countrey forbids me to publish. Germany nourisheth many cantors but few musicians. For very few, excepting those which are or have been in the chapels of princes, do truly know the art of singing. For those magistrates to whom this charge is given, do appoint for the government of the service youth cantors, whom they chuse by the shrillnesse of their voyce, not for their cunning in the art, thinking that God is pleased with bellowing and braying, of whom we read in the scripture that he rejoyceth more in sweetness than in noyse, more in the affection than in the voyce. For when Salomon in the Canticles writeth that the voyce of the church doth sound in the eares of Christ, hee doth presently adjoyne the cause, because it is sweet. Therefore well did Baptista Mantuan (that modern Virgil) inveigh every puffed up ignorant bellowing cantor, saying,

"Cur tantis delubra boum mugitibus imples,

"Tu ne Deum tali credis placare tumultu."

'Whom the prophet ordained should be praised in cymbals, not simply, but well sounding.

'Of the ten precepts necessary for every singer.

'Being that divers men doe diversely abuse themselves in God's praise, some by moving their body undecently, some by gaping unseemely, some by changing the vowels, I thought good to teach all cantors certain precepts by which they may erre lesse.

'1. When you desire to sing any thing, above all things marke the tone and his repercussion. For he that sings a song without knowing the tone, doth like him that makes a syllogisme without moode and figure.

'2. Let him diligently marke the scale under which the song runneth, least he make a flat of a sharpe, or a sharpe of a flat.

'3. Let every singer conforme his voyce to the words, that as much as he can he make the concent sad when the words are sad, and merry when they are merry. Wherein I cannot but wonder at the Saxons, the most gallant people of all Germany (by whose furtherance I was both brought up and drawne to write of musicke) in that they use in their funerals an high, merrie, and jocunde concent, for no other cause I thinke, than that either they hold death to be the greatest good that can befall a man (as Valerius, in his fifth book, writes of Cleobis and Biton, two brothers) or in that they believe that the soules (as it is in Macrobius his second booke De Somnio Scip.) after this body doe returne to the original sweetness of music, that is to heaven, which if it be the cause, we may judge them to be valiant in contemning death, and worthy desirers of the glory to come.

'4. Above all things keepe the equality of measure, for to sing without law and measure is an offence to God himselfe, who hath made all things well in number, weight, and measure. Wherefore I would have the Easterly Francki (my countrymen) to follow the best manner, and not as before they have done, sometime long, sometime to make short the notes in plain-song, but take example of the noble church of Herbiopolis, their head, wherein they sing excellently. Which would also much profit and honour the church of Prage, because in it also they make the notes sometimes longer, sometime shorter than they should. Neither must this be omitted, which that love which we owe to the dead doth require, whose vigils (for so are they commonly called) are performed with such confusion, hast, and mockery (I know not what fury possesseth the mindes of those to whom this charge is put over) that neither one voyce can be distinguished from another, nor one syllable from another, nor one verse sometimes throughout a whole Psalme from another; an impious fashion, to be punished with the severest correction. Think you that God is pleased with such howling, such noise, such mumbling, in which is no devotion, no expressing of words, no articulating of syllables?

'5. The songs of authentical tones must be timed deepe of the subgall tones, high of the neutrall meanly, for these goe deep, those high, the other both high and low.

'6. The changing of vowels is a signe of an unlearned singer. Now though divers people do diversely offend in this kinde, yet doth not the multitude of offenders take away the fault. Here I would have the Francks to take heed they pronounce not u for o, as they are wont saying nuster for noster. The country churchmen are also to be censured for pronouncing Aremus instead of Oremus. In like sort doe all the Renenses, from Spyre to Confluentia, change the vowel i into the diphthong ei, saying Mareia for Maria. The Westphalians for the vowel a pronounce a and e together, to wit, Aebste for Abste. The lower Saxons, and all the Suevians, for the vowel e read e and i, saying Deus for Dens. They of Lower Germany do all

'expresse u and e instead of the vowel u. Which 'errours, though the German speech doth often require, yet doth the Latin tongue, which hath the 'affinitie with ours, exceedingly abhorre them.

'7. Let a singer take heed least he begin too loud, 'braying like an asse; or when he hath begun with 'an uneven height, disgrace the song. For God is 'not pleased with loud cryes, but with lovely sounds; 'it is not saith our Erasmus the noyse of the lips, 'but the ardent desire of the heart, which like the 'loudest voyce doth pierce God's eares. Moses spake 'not, yet heard these words, "Why dost thou cry 'unto me?" But why the Saxons, and those that 'dwell upon the Balticke coast, should so delight in 'such clamouring, there is no reason, but either 'because they have a deafe God, or because they 'thinke he is gone to the south side of heaven, and 'therefore cannot so easily heare both the easterlings 'and the southerlings.

'8. Let every singer discern the difference of 'one holiday from another, least on a sleight holiday 'he either make too solemne service, or too sleight 'on a great.

'9. The uncomely gaping of the mouth, and un- 'graceful motion of the body is a signe of a mad 'singer.

'10. Above all things let the singer study to please God, and not men (saith Guido) there are 'foolish singers who contemne the devotion they 'should seeke after, and affect the wantonnesse which 'they should shun, because they intend their singing 'to men not to God, seeking for a little worldly 'fame, that so they may lose the eternal glory, 'pleasing men that thereby they may displease God, 'imparting to others that devotion which themselves 'want, seeking the favour of the creature, con- 'temning the love of the creatour. To whom is due 'all honour, and reverence, and service. To whom 'I doe devote myself and all that is mine; to him 'will I sing as long as I have being, for he hath 'raised mee (poore wretch) from the earth, and from 'the meanest basenesse. Therefore blessed be his 'name world without end. Amen.'

To speak of this work of Ornithoparcus in general, it abounds with a great variety of learning, and is both methodical and sententious. That Douland looked upon it as a valuable work may be inferred from the pains he took to translate it, and his dedication of it to the lord treasurer, Robert Cecil, earl of Salisbury.

It appears by the several dedications of his four books of the Micrologus, that Ornithoparcus met with much opposition from the ignorant and envious among those of his own profession; of these he speaks with great warmth in each of these epistles, and generally concludes them with an earnest request to those to whom they are addressed, that they would defend and protect him and his works from the malicious backbiters of the age.

STEFFANO VANNEO, director of the choir of the church of St. Mark at Ancona, was the author of a book in folio, intitled *Recanctum de Musica aurea*, published at Rome in 1533. It was written origi-

nally in Italian, and was translated into Latin by Vincentio Rossetto of Verona. The greater part of it seems to be taken from Franchinus, though the author has not confessed his obligation to him, or indeed to any other writer on the subject.

GIOVANNI MARIA LANFRANCO, was the author of *Scintille di Musica*, printed at Brescia in 1533, in oblong quarto, a very learned and curious book.

It is well known that about this time the printers, and even the booksellers, were men of learning; one of this latter profession, named GEORGE RHAW, and who kept a shop at Wittemberg, published in 1536, for the use of children, a little book, with this title, *Enchiridion utriusque Musicæ Practicæ Georgio Rhaw, ex varijs Musicorum Libris, pro Pueris in Schola Vitebergensi congestum*. In the size, manner of printing, and little typhographical ornaments contained in it, it very much resembles the old editions of Lilly's grammar, and seems to be a book well calculated to answer the end of its publication.

One LAMPADIUS, a chanter of a church in Luneburg in 1537, published a book with this title, *Compendium Musices, tam figurati quam plani Cantus ad Formam Dialogi, in Usum ingenuæ Pubis ex eruditissimis Musicorum scriptis accurate congestum, quale ante hac nunquam Visum, et jam recens publicatum*. Adjectis etiam *Regulis Concordantiarum et componendi Cantus artificio, summam omnia Musices præcepta pulcherrimis Exemplis illustrata, succincte et simpliciter complectens*.

SEBALDUS HEYDEN, of Nuremberg, was the author of a tract intitled *Musicæ, id est, Artis Canendi*. It was published in 1537, and again in 1540, in quarto; the last of the two editions is by much the best. In this book the author has thus defined the word *Tactus*, which in music signifies the division of time by some external motion: '*Tactus est digi- 'timotus aut nutus, ad temporis tractatum, in vices 'æquales divisum, omnium notularum, ac pausarum 'quantitates coaptans*.' An explanation that carries the antiquity of this practice above two hundred and thirty years back from the present time.*

NICOLAUS LISTENIUS, of Leipsic, in 1543 published a treatise *De Musica*, in ten chapters, which he dedicated to the eldest son of Joachim II. duke of Brandenburg. It was republished in 1577, with the addition of two chapters, at Nuremberg. Glareanus, in his *Dodecachordon*, has given a *Miserere*, in three parts, from this work of Listenius, which, whether

* This book is dedicated to Hieronymus Baumgartner, a great encourager of learning, and one of five merchants of Augsburg, who, as Roger Ascham relates, were thought able to disburse as much ready money as five of the greatest kings in Christendom.

The true spelling of this family name is Paumgartner; and it seems that these brethren, or at least one of them, possessed the same princely spirit as that which distinguished the Fuggers of the same city, who were three in number, and are mentioned in the passage above-cited from Ascham. Erasmus has drawn a noble character of one of the Paumgartners, named John, in one of his Epistles, in which he takes occasion to celebrate the liberality of the Fuggers also: and there is extant a letter of John Paumgartner to Erasmus, filled with sentiments of the highest friendship and benevolence. It is printed in the Appendix to Dr. Jortin's life of Erasmus, pag. 471. John Paumgartner had a son named John George, who seems to have inherited the liberal spirit of his father, for he was desirous of making Erasmus some valuable present, which the latter modestly declined, telling him in one of his Epistles, that he had already received one of his father, a cup, a proper gift to a Dutchman; but, says he, I am not able to drink Batavice à la Hollandaise. See Dr. Jortin's Life of Erasmus, vol. I. pag. 536.

it be a composition of his own, or of some other person, does not clearly appear.

The effects of these, and numberless other publications, but more especially the precepts for the composition of counterpoint delivered by Franchinus, were very soon discoverable in the great increase of practical musicians, and the artful contexture of their works. But although at this time the science was improving very fast in Italy, it seems that Germany and Switzerland were the forwardest in producing masters of the art of practical composition: of these some of the most eminent were Iodocus Pratensis, otherwise called Jusquin de Prez, Jacob Hobrecht, Adamus ab Fulda, Henry Isaac, Sixtus Dietrich Petrus Platensis, Gregory Meyer, Gerardus à Salice, Adamus Luyr, Joannes Richafort, Thomas Tzamen, Nicholas Craen, Anthony Brumel.

The translation of the works of the Greek harmonicians into a language generally understood throughout Europe, and the wonderful effects ascribed to the music of the ancients, excited a general endeavour towards the revival of the ancient modes; the consequence whereof was, that at the beginning of the sixteenth century, scarce a mass, a hymn, or a psalm was composed, but it was framed to one or other of them, as namely, the Dorian, the Lydian, the Phrygian, and the rest, and of these there are many examples now in print. This practice seems to have taken its rise in Germany; and the opinion that the music of the ancients was retrievable, was confirmed by the publication, in the year 1547, of a very curious book entitled ΔΟΔΕΚΑΧΟΡΔΟΝ, the work of Glareanus, of Basil, the editor of Boetius before mentioned. The design of this book is to establish the doctrine of Twelve modes, contrary to the opinion of Ptolemy, who allows of no more than there are species of the Diapason, and those are Seven. The general opinion is, that Glareanus has failed in the proof of his doctrine; he was nevertheless a man of very great erudition, and both he and his work are entitled to the attention of the learned, and merit to be noticed in a deduction of the history of a science, which if he did not improve, he passionately admired.

He was a native of Switzerland, his name HENRICUS LORITUS GLAREANUS. The time when he flourished was about the year 1540. Gerard Vossius, a very good judge, styles him a man of great and universal learning, and a better critic than some were willing to allow him. He was honoured with the poetic laurel and ring by the emperor Maximilian I. His preceptor in music was, as he himself declares, Joannes Cochläus above-mentioned; and he acknowledges himself greatly beholden for his assistance in the prosecution of his studies, to Erasmus, with whom he maintained at Basil an intimate and honourable friendship. For taking occasion to mention a proverbial expression in the Adagia of Erasmus, wherein any sudden, abrupt, and unnatural transition from one thing to another is compared to 'the passing from the Dorian to the Phrygian mood,* mentioned also by Franchinus, from whom possibly

* The Dorian is said to be grave and sober; the Phrygian fierce and warlike.

Erasmus might have taken it, he acknowledges his obligation to them both, and speaks of his intimacy with the latter in these words: 'I am not ignorant of what many eminent men have written in this our age concerning this Adagium, two of whom however are chiefly esteemed by me, and shall never be named without some title of honour, Franchinus and Erasmus Roterodamus; the one was a mute master to me, but the other taught me by word of mouth; to both of them I acknowledge myself indebted in the greatest degree. Franchinus indeed I never saw, although I have heard that he was at Milan when I was there, which is about twenty-two years ago; but I was not then engaged in this work: however, in the succeeding years, that I may ingenuously confess the truth, the writings of that man were of great use to me, and gave me so much advantage, that I would read and read over again, and even devour the music of Boetius, which had not for a long time been touched, nay it was thought not to be understood by any one. As to Erasmus, I lived many years in familiarity with him, not indeed in the same house, but so near, that each might be with the other as often as we pleased, and converse on literary subjects, and those immense labours which we sustained together for the common advantage and use of students; in which conversations it was our practice to dispute and correct each other; I, as the junior, gave place to his age; and he as the senior bore with my humours, sometimes chastising, but always encouraging me in my studies; and at last I ventured to appear before the public, and transmit my thoughts in writing; and whatsoever he had written in the course of twenty years, he would always have me see before-hand; and really if my own affairs would have permitted it, I would always have been near him. I have been however present at several works: he did not take it amiss to be found fault with, as some would do now, provided it were done handsomely; nay he greatly desired to be admonished, and immediately returned thanks, and would even confer presents on the persons that suggested any correction in his writings. So great was the modesty of the man.'

But notwithstanding the prohibition implied in this adage, it seems that Iodocus Pratensis paid but little regard to it; nay Glareanus gives an instance of a composition of his, in which by passing immediately from the Dorian to the Phrygian mode, he seems to have set it at defiance.

A little farther on, in the same chapter, Glareanus relates that he first communicated to Erasmus the true sense of the above adage; but that the latter, drawing near his end, when he was revising the last edition, and having left Friburg, where Glareanus resided, to go to Basil, the paper which Glareanus had delivered to him containing his sentiments on the passage, was lost, and his exposition thereof neglected.

In another place of the Dodecachordon Glareanus gives an example of a composition in the Æolian mood, by Damianus à Goes, a Portuguese knight and nobleman, of whom a particular account will be shortly given. This person, who was a man of learn-

ing, and had resided in most of the courts of Europe, came to Friburg, and dwelt some time with Glareanus, who upon his arrival there, desirous of introducing him to the acquaintance of this illustrious stranger, invited Erasmus to his house, where he continued some months in a sweet interchange of kind offices, which laid the foundation of a friendship between the three, which lasted to the end of their lives. In a letter now extant from Erasmus to the bishop of Paris, he recommends his friend Glareanus, on whom he bestows great commendations, to teach in France. It seems that Erasmus himself had received invitations to that purpose, but that he declined them. His letter in favour of Glareanus has this handsome conclusion: 'Sed heus tu, vacuis epistolis non est arces-
'sendus (Glareanus :) viaticum addatur oportet, velut
'arrhabo reliqui promissi. Vide quam familiariter
'tecum agam; ceu tuæ sollicitudinis oblitus. Sed ita
'me tua corripit humanitas, quæ hanc docuit impu-
'dentiam: quam aut totam ignoscas oportet, aut
'bonam certe partem tibi ipsi imputes.'

He died in the year 1563, and was buried in the church of the college of Basil, where there is the following sepulchral inscription to his memory:—

'Henricus Glareanus, poeta laureatus, gymnasii
'hujus ornamentum eximium, expleto feliciter su-
'premo die, componi hic ad spem futuræ resurrectionis
'providit, cujus manibus propter raram eruditionem,
'candoremque in profitendo, senatus reipublicæ lite-
'rariæ, gratitudinis et pietatis ergo, monumentum
'hoc æternæ memoriæ consecratum, posteritati ut
'extaret, erigi curavit. Excessit vita anno salutis
'MDLXIII. die xxviii mensis Martii, ætatis suæ
LXXV'

CHAP. LXX.

THE design of Glareanus in the Dodecachordon was evidently to establish the doctrine of Twelve modes, in which he seems not to have been warranted by any of the ancient Greek writers, some of whom make them to be more, others fewer than that number; and after Ptolemy had condemned the practice of increasing the number of the modes by a hemitone, that is to say, by placing some of them at the distance of a hemitone from others; and in short demonstrated that there could in nature be no more than there are species of the diapason, it seems that Glareanus had imposed upon himself a very difficult task.

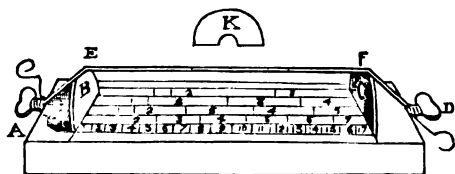
In the eleventh chapter of his first book, premising that no part of music is so pleasant or worthy to be discussed as that relating to the modes, he admits that they are no other than the several species of the diapason, which latter do themselves arise out of the different species of diapente and diatessaron. He says that of the fourteen modes arising from the species of diapason, the writers of his time admit only eight, though thirteen have been used by some constantly, and by others occasionally. He adds that those who confine the number to eight, do not distinguish those eight by a true ratio, but by certain rules, which are not universal. He farther says that the moderns call the modes by the name of Tones,

and persist in the use of that appellation with such an invincible obstinacy, as obliges him to acquiesce in their error, which he says was adopted by Boetius himself, who, in the fourteenth chapter of his fourth book, says that there exist in the species of the diapason, the modes, which some call Tropes or Tones.

Chapter XVI. directs the method of infallibly distinguishing the musical consonances by the division of the monochord; and here the author takes occasion to lament, that for more than eighty years before his time, the sciences, and music in particular, had been greatly corrupted; and that many treatises on music had been given to the public by men who were not able to decline the very names or terms used in the science; a conduct which had sometimes excited his mirth, but oftener his indignation. Indeed for Guido, Berno, Theogerus the bishop, Vuillehelmus and Joannes, afterwards pope, he offers an excuse, by saying that they lived at a time when all the liberal sciences, together with correct language, lay more than asleep. Of Boetius he says, that no one taught music more learnedly or carefully: Franchinus he also commends for his skill and diligence; but he censures him for some grammatical inaccuracies, arising from his ignorance of the Greek language. He then proceeds according to the directions of Boetius, to explain the method of distinguishing the consonances by means of the monochord, for the division whereof he gives the following rules:—

'Boetius, the true and only artificer in this respect,
'in the last chapter of his fourth book teaches in what
'manner the ratios of the consonances may undoubt-
'edly be collected by a most easy and simple instru-
'ment, consisting of a chord stretched from a Magas
'to a Magas, at either end of the chord, each im-
'moveable, but with a moveable Magas placed be-
'tween them, to be shifted at pleasure. The instru-
'ment being thus disposed, if the intermediate space
'over which the chord is stretched, and which lies
'between the immoveable Magades, be divided into
'Three equal parts, and the moveable Magas be
'placed at either section, so that One part of the
'divided space will be left on one side of the Magas,
'and Two parts on the other, for thus the duple ratio
'will be preserved, the two parts of the chord being
'struck by a Plectrum, will sound the consonant dia-
'pason. But if the space between the immoveable
'Magades be divided into Four parts, and the move-
'able Magas be so placed, as that One part may be
'left on one side thereof, and Three on the other,
'then will the triple ratio be preserved; and the two
'parts of the chord being struck by a Plectrum will
'sound the consonant diapason cum diapente. More-
'over, if the same space be divided into Five parts,
'and One thereof be left on one side, and Four on
'the other, that so the ratio may be Quadruple, the
'same two parts of the chord will sound a Disdiapason,
'the greatest of all consonants, and which is in a
'quadruple ratio; and thus all the consonants may
'be had. Again, let the same division into Five
'parts remain, and let Three of those parts be left on
'one side, and two on the other; in that case you
'will find the first consonant diapente in a super-

'particular genus, viz., in a Sesquialtera ratio. But
'if the space between the immoveable Magades be
'divided into Seven parts, and the moveable Magas
'leave Four of them on one side, and Three on the
'other, in order to have a Sesquitercia ratio, those
'two parts of the Chord will sound a diatessaron con-
'sonance. Lastly, if the whole space be divided into
'Seventeen parts, and Nine of them be left on one
'side, and Eight on the other of the moveable Magas,
'it will shew the tone, which is in the Sesquioctave
'ratio. But that these things may be more clearly
'understood, we will demonstrate them by letters, as
'he [Boetius] has done. Let A D be the regula, or
'table, upon which we intend to stretch the chord;
'the immoveable Magades, which the same Boetius
'calls hemispheres, are the two E and F, erected
'perpendicular to the Regula at B and C. Let the
'chord A E F D be stretched over these, and let K
'be the moveable Magas to be used within the space
'B C. If this be so placed, and the space be divided
'into three, so that one part may remain on one side,
'and two on the other; this chord by the application
'of a plectrum will sound a diapason, the queen of
'consonances; but if the space be divided into Four,
'and the chords on each side be as Three to One, the
'consonant diapason with a diapente will be produced.
'Moreover, if the space be divided into Five parts,
'Four against One will give a disdiapason, and Three
'to Two a diapente; and when the space is divided
'into Seven, Four against Three, produces a diates-
'saron; and lastly, when the space is divided into
'Seventeen, Nine to Eight, gives the tone: we here
'subjoin the type:—



Chapter XXI. which is the last of the first book, is
a kind of introduction to the author's doctrine of the
'Twelve modes, in which, speaking in his own person,
he delivers his sentiments in these words:—

'When I had put the last hand to this book,
'I obtained unexpectedly, by means of my excellent
'friend Bartholomæus Lybis, Franchinus's work
'*De Harmonia Musicorum Instrumentorum*, which,
'though I had eagerly sought after it many years,
'I could never procure. This I take to have been
'the last work of Franchinus, for he dedicated it in
'the year of Christ, 1518, to Joannes Grolerius of
'Lyons, who was treasurer of Milan to Francis king
'of France, having more than twenty years before
'that published a treatise of practical music. I was
'more overjoyed than I can express at the receipt
'of it; for I expected to have found certain passages
'of some authors, more especially Greek ones, cleared
up by him, as they had given me a great deal of
trouble for several years; and my hopes were
'greatly increased on reading the first chapter, where
'he says, that he had translated Bryennius, Bacchius,

'Aristides Quintilianus, and Ptolemy, from the Greek
'into the Latin language. I began to peruse him very
'carefully, and found in him his usual exactness and
'diligence; more especially in those things which
'Boetius treats of in the three genera of modulation
'by the five tetrachords, and in what related to the
'proportions and Proportionalities, for so they call
'them; but when I perceived that in his last book
'he had undertaken to discuss that abstruse subject
'the musical modes, I flattered myself with the hopes
'of finding Franchinus similar to himself in that
'part, and that he had produced somewhat worthy
'to be read from so many authors; but my expecta-
'tions were not answered, and as far as I can con-
'jecture, he does not seem to have understood the
'words of Apuleius in his *Florida*,* lib. I. concern-
'ing Antigenides, or those of Marcianus Capella,
'Lucianus Athenæus, and Porphyrius; for he no
'where quotes those places which require explanation,
'which I greatly wonder at. He indeed several
'times quotes Plato, but not in those places where
'the reader is puzzled, such as that is in lib. iii.
'*De Rep.* concerning the authors of the six Modes.
'Truly, what Franchinus says in that book, except
'what is taken from Boetius, I may say without any
'error or spleen, for I much esteem the man, are
'words compiled by sedulous reading from various
'commentaries, but in no manner helping to clear up
'the matter. As that comparison of the four modes
'to four complexions, colours, and poetical feet, three
'other modes being banished undeservedly. I had
'much rather have had him ingenuously confess,
'either that he did not know the differences of those
'modes, or that they were Aristoxenean paradoxes,
'the opinions of which author were laughed at, re-
'jected, and exploded by Boetius and Ptolemy, men
'eminent in this art. Franchinus himself doubted as
'much about the eight modes as the common people
'did; for in this book, which is the last of his works,
'he does not dare even so much as to mention the
'Hypomixolydian, which he had named in his book
'entitled *Practica*, lib. I. chapters 8 and 14, confiding
'implicitly, as he himself confesses, in the opinions of
'others. But if it be not permitted to repeat the
'species of diapason, which objection he himself
'seems to make in his last work, then the Hyper-
'mixolydian will be no mode, since its diapason is
'wholly the Hypodorian. But Franchinus in this
'work leaving out the Hypomixolydian, which has
'the same diapason with the Dorian, and is our
'eighth, takes in the Hypermixolydian, that we may
'collect and confirm by his own authority the number
'of all the modes to be eight, according to the common
'opinion; but as there are in fact no more than seven
'species of the diapason, so there can be only seven
'modes, after that form which the church still retains,
'together with an eighth, which has a system inverse
'to that of the first mode. Franchinus says that to
'the seven modes of Boetius, viz. the Hypodorian,
'Hypophrygian, Hypolydian, Dorian, Phrygian,
'Lydian, and Mixolydian; and that of Ptolemy,

* *Florida*, the name of a book of Apuleius. Fabricius, *Bibliothec.*
Lat. tom. I. pag. 520.

'named the Hypermixolydian, Aristoxenus added these five, the Hypoastian, the Hypoæolian, Iastian, Æolian, and Hyperastian, and so made the number thirteen; but as five of these were, according to the authority of Bryennius to be rejected, and as he could not find out the name of the Hypermixolydian, not knowing that it was the same with the Hyperastian of Aristoxenus, he has recourse to the Hypermixolydian of Ptolemy, that the pretty octonary number of modes should not be lost: but the reader will hear our opinion concerning those things in its proper place. We shall now subjoin the words of Franchinus, that the reader may himself discern the opinion of this man concerning the modes; for after he has numbered up the species of the diapason that constitute the seven modes of Boetius and the eight of Ptolemy, he subjoins these words: "Posterity has retained only these eight modes, because as they return in a circle, they comprehend the intire diatonic extension of an immutable and perfect system of fifteen chords; wherefore they esteemed the other five modes, viz., Hypoastian, Hypoæolian, Iastian, Æolian, and Hyperastian as useless to the sensible harmony of a full and perfect system, to use the words of Bryennius; and as affording only an idle demonstration of harmony. But Marcianus numbers up indeed those fifteen modes, which Cassiodorus so ranged, that the constitutions of each would differ by only the intension of a semitone: but as every constitution, according to Aristoxenus, makes up a diapason of twelve equisonant semitones, those two acuter modes, the Hyperæolian and Hyperlydian are rejected, seeing they do not complete a diapason in the full system of fifteen chords, and are found superfluous, for they go beyond the disdiapason system by two semitones."

'Thus far Franchinus: in which discourse he plainly shews that he was not able to clear up the difficulties in which the doctrine of the modes is involved, all which arise, not so much from the subject itself, as from the many different appellations, for there are more than twenty, of these modes. We shall however follow the nomenclatura of Aristoxenus, which does not contradict us in what concerns the modes, nor yet Boetius, although they do not agree in other things. Moreover, neither Franchinus nor Capella, in my opinion, understood Aristoxenus. The constitution of Cassiodorus is throughout repugnant to Boetius, yet, which I greatly wonder at, Franchinus did not dare to reprehend him, though he was a great assertor of the erudition of Boetius; and we do not think it convenient to refute him till we have laid the foundation of our hypothesis, as we shall do hereafter. But in the mean time we admonish the reader that the number of names, though very many, does not change the nature of modes; nor can there really be more modes than there are species of the diapason, for whatsoever Harmonia has instituted concerning them, must fall under these seven species of the diapason; this is the issue and the sum total of the whole business. Wherefore the same Franchinus is not without reason accused of not having reflected

'on these things, when he has argued on others most shrewdly, and improved them with exact care. For the arithmetical and harmonical division in the species of the diapason were no secret to him, since he has taught them himself in his other works; but this also is worthy of reprehension, that agreeing with the common custom, he puts only four final keys in the seven modules of the diapason, rejecting the other three, when that of H only ought to be rejected.

'But however, as Franchinus cites Marcianus Capella, and omits his words, I thought proper to subjoin them here, that the reader may judge for himself, and at the same time see how well, or rather how ill, Cassiodorus has adapted them to that form described by Franchinus. "There are," says Marcianus Capella, fifteen tropes, but five of them only are principals, to each of which two others adhere, first, the Lydian, to which the Hyperlydian and Hypolydian adhere; second, the Iastian, to which are associated the Hypoastian and Hyperastian; third, the Æolian with the Hypoæolian; fourth, the Phrygian, with the Hypophrygian and Hyperphrygian; fifth, the Dorian, with the Hypodorian and Hyperdorian;" thus far Marcianus, who made five principals with two others agreeing with each, that they might altogether make up the number fifteen. But we, as Aristoxenus has done, shall put six principals with each a plagal, that the number may be twelve, omitting the Hypermixolydian of Ptolemy, and the Hyperæolian and Hyperphrygian, which are afterwards superadded. The six principals are the Dorian, Phrygian, Lydian, Mixolydian, Æolian, and Iastian; by some writers termed the Ionian; and the six plagals compounded with the preposition Hypo, the Hypodorian, Hypophrygian, Hypolydian, Hypomixolydian, Hypoæolian, Hypoastian, which is also the Hypoionian. These are the true undoubted twelve modes, which we undertake to comment on in the following book.

'Aristoxenus calls the Hypomixolydian the Hyperastian, in the manner of the rest of the modes compounded with Hyper; for if any one compounds those principals with the word Hyper, he will find six other modes, but they fall in with the others. Thus the Hyperastian of Aristoxenus falls into the Hypomixolydian; and the Hypomixolydian of Ptolemy into the Hypodorian; in the same manner the Hypodorian into the Hypoæolian; the Hyperphrygian into the Hyperlydian; the Hyperlydian into the Hypoionian or Mixolydian; and the Hyperæolian into the Hypophrygian. Hence it appears that many of the difficulties which attend the modes, arise from the multiplicity of their names, and not from the modes themselves.

But notwithstanding this assertion of Glareanus, it is very clear that the doctrine of the modes was incumbered with other difficulties than what arose from the confusion of their names. For as to the number thirteen, which Aristoxenus assumed, and the fifteen of Marcianus Capella, they arise from a practice, which Ptolemy in the strongest terms

condemns, namely, the augmenting the number of the modes by semitones, that is to say, by making many of the modes a semitone only distant from each other; departing from the order in which the seven species of diapason arise; but Glareanus, though a bigotted admirer of the ancients, has declined this method, and has borrowed his division of the modes from that of the ecclesiastical tones, introducing the arithmetical and harmonical division of each species of diapason, precisely in the same manner as St. Gregory had done by the four primitive tones instituted by St. Ambrose.*

This contrivance of Glareanus, which, to say no worse of it, has but little to recommend it, did not answer the end of vindicating the ancient practice for the number of the modes thus adjusted, coincides neither with the thirteen modes of Aristoxenus, nor the fifteen of Marciannus Capella ; in short, it gives but twelve, and that for this reason, the diapason from h to h_1 is clearly incapable of an arithmetical division, by reason of the semidiapente between h and F ; and it is as clear that the diapason between F and f is incapable of an harmonical division, by reason of the excessive fourth between F and h_1 , the consequence whereof is, that admitting five of the species to be capable of both divisions, and h and F to be each capable of but one, the number of divisions

can be but twelve ; † but these, in the opinion of the author, are so emphatically true and just, as to afford a reason for intitling his work *Dodecachordon*.

Glareanus has in several parts of his book admitted that the species of Diapason are in nature but seven, or, in other words, that in every progression of seven sounds in the diatonic series, the tones and semitones will arise in the same order as they do in one or other of those seven species; it therefore seems strange that he should endeavour to effect that which his own concession supposes to be impossible; but it seems he meant nothing more by this manifold distinction of modes than to assign to the final note of each a different pitch in the scale or system: in this he makes himself an advocate for the Musical doctrine, as it is called, of the ancients, which however mistaken has been shewn to be reconcilable to that other known by the name of the Harmonic doctrine of the same subject.

Not to pursue an enquiry into the nature of a subject which has long since eluded a minute investigation, and which neither Franchinus, nor this author, nor Doni, nor Dr. Wallis, nor indeed any of the most learned musicians of modern times, could ever yet penetrate; the following scheme, containing Glareanus's system of the twelve modes, is here exhibited, and is left to speak for itself :—

Hypodorian.		Hypophrygian		Hypolydian.		Dorian.		Phrygian.		Lydian.		Mixolydian.		Hypomix.	
First species of Diapason from A to a															
Second.	arith-met.	har-mocl.													
This is the <i>Æolian</i> mode of <i>Aristoxenus</i> .															
Second species of Diapason from B to b.															
Fourth.	arith-met.	har-mocl.													
This division has no place in the <i>Diatonic</i> because of the tritone and semidiapente.															
Third species of Diapason from C to c.															
Old Sixth.	arith-met.	har-mocl.													
This by us called the fifth, by <i>Aristoxenus</i> the <i>Iastian</i> , and by others the <i>Ionian</i> .															
Fourth species of Diapason from D to d.															
Eighth.	arith-met.	har-mocl.													
This by <i>Aristoxenus</i> is called the <i>Hyperastian</i> , but is the <i>Hypermixolydian</i> .															
First.	arith-met.	har-mocl.													
Fifth species of Diapason from E to e.															
Tenth.	arith-met.	har-mocl.													
This is the <i>Hypereolian</i> mode of <i>Aristoxenus</i> .															
Third.	arith-met.	har-mocl.													
Sixth species of Diapason from F to f.															
This division is improper for the <i>Diatonic</i> , because of the semidiapente and tritone.															
Old Fifth.	arith-met.	har-mocl.													
Seventh species of Diapason from G to g.															
Twelfth.	arith-met.	har-mocl.													
This by us is named the sixth, by <i>Aristoxenus</i> the <i>Hypoastian</i> .															
Seventh.	arith-met.	har-mocl.													
The eighth of <i>Ptolemy</i> being the same in its nature as the second.															

Diapason.

* The arithmetical division of the diapason is 6, 9, 12, the harmonical 6, 8, 12. See the reason of this distinction pag. 115 of this work.

† To this purpose Malcolm expresses himself very clearly and fully in a passage, which because it accounts for the distinction of the modes into the authentic and plagal, is here given in his own words :—

'I find they [the modes] were generally characterized by the species of 8ve. after Ptolemy's manner, and therefore reckoned in all 7. But afterwards they considered the harmonical and arithmetical divisions of

' the 8ve, whereby it resolves into a 4th above a 5th, or a 5th above a 4th.

'And from this they constituted twelve modes, making of each 8ve. two

'different modes, according to this different division; but because there are two of them that cannot be divided both ways, therefore there are

'are two of them that cannot be divided both ways, therefore there are
'but twelve modes. To be more particular, consider, in the natural

'system there are 7 different octaves proceeding from these 7 letters, a,

'b, c, d, e, f, g'; each of which has two middle chords, which divide it

'harmonically and arithmetically, except f, which has not a true 4th,

But if the ancient modes required each a new tuning of the lyre, and that they did is expressly said by Ptolemy and others, there is great reason to believe the tones and semitones by every such tuning

'(because b is three tones above it, and a fourth is but two tones and a semitone) and b, which consequently wants the true 5th. (because f is only two tones and two semitones above it, and a true 5th contains 2 tones and a semitone) therefore we have only five octaves that are divided both ways, viz. a, c, d, e, g; which make ten modes according to these different divisions, and the other two f and b make up the twelve. Those that are divided harmonically, i. e. with the 5ths lowest, were called authentic, and the other plagal modes. See the following scheme:—

MODES.		With respect to these distinctions, the following are the sentiments of the author now citing.—		
Plagal. Authentic.		They considered that an 8ve, which wants a 4th or 5th, is imperfect; these being the concords next to the 8ve. the song ought to touch these chords most frequently and remarkably; and because their concord is different, which makes the melody different, they establish by this two modes in every natural octave, that had a true 4th and 5th: then if the song was carried as far as the octave above, it was called a perfect mode; if less, as to the 4th or 5th, it was imperfect; if it moved both above and below, it was called a mixt mode: thus some authors speak about these modes. Others, considering how indispensable a chord the 5th is in every mode, they took for the		
8ve.	8ve.	4th	5th	6th
g	c	g	c	g
a	d	a	d	a
b	e	b	e	b
c	f	c	f	c
d	g	d	g	d
e	a	e	a	e

'final or key-note in the arithmetically divided octaves, not the lowest chord of that octave, but that very 4th; for example the octave g is arithmetically divided thus, g—c—g, c is a 4th above the lower g, and a 5th below the upper g, this c therefore they made the final chord of the mode, which therefore properly speaking is c and not g; the only difference then in this method, betwixt the authentic and plagal modes is, that the authentic goes above its final to the octave, the other ascends a 5th, and descends a 4th, which indeed will be attended with different effects, but the mode is essentially the same, having the same final, to which all the notes refer. We must next consider wherein the modes of one species, as authentic or plagal, differ among themselves: this is either by their standing higher or lower in the scale, i. e. the different tension of the whole octave; or rather the different subdivision of the octave into its concinnous degrees. Let us consider then whether these differences are sufficient to produce so very different effects as have been ascribed to them; for example, one is said to be proper for mirth, another for sadness, a third proper to religion, another for tender and amorous subjects, and so on: whether we are to ascribe such effects merely to the constitution of the octave, without regard to other differences and ingredients in the composition of melody, I doubt any body now-a-days will be absurd enough to affirm; these have their proper differences, tis true, but which have so little influence, that by the various combinations of other causes, one of these modes may be used to different purposes. The greatest and most influencing difference is that of these octaves, which have the 3rd greater or lesser, making what is above called the sharp and flat key; but we are to notice, that of all the 8ves, except c and a, none of them have all their essential chords in just proportion, unless we neglect the difference of tone greater and lesser, and also allow the semitone to stand next the fundamental in some flat keys (which may be useful, and is sometimes used) and when that is done, the octaves that have a flat 3rd will want the 6th greater, and the 7th greater, which are very necessary on some occasions, and therefore the artificial notes ♯ and ♭ are of absolute use to perfect the system. Again, if the modes depend upon the species of 8ves, how can they be more than 7? And as to the distinction of authentic and plagal, I have shewn that it is imaginary with respect to any essential difference constituted hereby in the kind of the melody; for though the carrying the song above or below the final, may have a different effect, yet this is to be numbered among the other causes, and not ascribed to the constitution of the octaves. But it is particularly to be remarked, that those authors who give us examples in actual composition of their twelve modes, frequently take in the artificial notes ♯ and ♭, to perfect the melody of their key; and by this means depart from the constitution of the 8ve, as it stands in the first natural system. So we can find little certain and consistent in their way of speaking about these things; and their modes are all reducible to two, viz., the sharp and flat.' Treatise of Music, chap. xiv. sect. 5.

must have been dislocated; and in all probability for the purpose of preserving the order of nature, which, after all that has been said, will scarce allow of but two kinds of progression, namely, that in the diatonic series from A to a, and from C to c, the former the prototype of all flat, as the other is of all sharp keys. If this was the case, the only discrimination of the modes was their place in the system with respect to acuteness and gravity.

The partiality which Glareanus throughout his book discovers for the music of the ancients is thus to be accounted for. He was a man of considerable learning, and seems to have paid an implicit regard to the many relations of the wonderful effects of music, which Plutarch, Boetius, and many other writers have recorded; and no sooner were the writings of the ancient Greek harmonicians recovered and circulated through Europe, than he flattered himself with the hope of restoring that very practice of music to which such wonderful effects had been ascribed; and in this it seems he was not singular, for even the musicians of his time entertained the same hope. Franchinus by his publications had not only considerably improved the theory of the science, but had communicated to the world a great deal of that recondite learning, which is often more admired than understood; and although he had delivered the precepts of counterpoint, and thereby laid the foundation of a much nobler practice than the ancients could at any time boast of, many of his contemporaries forbore for a time to improve the advantages which he had put them in possession of, and vainly attempted to accommodate their works, which for the most part were compositions of the symphonic kind, to a system which admitted of no such practice: that this was the case, is most evident from that great variety of compositions contained in the Dodecachordon, which, though they are the works of Iodocus Pratensis, Jacobus Hobrechth, Adamus ab Fulda, Petrus Platensis, Gerardus à Salice, Andreas Sylvanus, Gregorius Meyer, Johannes Mouton, Adamus Luyr, Antonius Brumel, Johannes Ockenheim, and many others, the far greater number contemporaries of Glareanus, are nevertheless asserted to be in the Dorian, the Lydian, the Phrygian, and other of the modes, and that with as much confidence as if the nature of the ancient modes had never been a subject of dispute. The following cantus for four voices, the work of an anonymous author, has great merit, and is given by Glareanus as an exemplar of the Dorian:—

A Fu - ro - re tu - o Do - mi-ne De -

A Fu - ro - re tu - o Do - mi-ne De - us, A Fu - ro - re tu -

A Fu - ro - re tu - o

A Fu - ro

us ser - - - va A - ni - mas no - - -
 - - o Do - mi - ne De - us ser - va A - ni - mas nostras A - ni - mas no - - -
 Do - - - mi - ne De - - - us ser - va A - ni - mas no -
 - - re tu - o Do - mi - ne De - us ser - va A - ni - mas no - -

- stras, A Dæ - mo - ne ma - - - - lo Ab Ho - mi - ne i -
 - stras, A Dæ - mo - ne ma - - lo Ab Ho - mi - ne i - ni -
 - stras, A Dæ - mo - ne ma - - - - lo Ab Ho - mi - ne i -
 - stras, A Dæ - mo - ne ma - - - - lo Ab Ho - - - mi - ne.

- ni - - quo, et do - - lo - - so et men - da - - - ci, A
 - - - quo, et do - - lo - - so et men - da - ci, A
 - - ni - quo, et do - - lo - - so et men - da - ci, A
 . . i - ni - quo, et do - - lo - - so et men - da - ci, A

cæ - ci - ta - - - te men - - tis no - - stræ, ab om - - ni - bus ma - lis .
 cæ - ci - ta - - te . men - tis no - - stræ, ab om - - nibus ma -
 cæ - ci - ta - te men - - tis no - - stræ, ab om - - nibus ma - lis
 cæ - - ci - ta - te men - - tis no - - stræ, ab om - nibus ma - lis Do -

. . Do - mi - ne ser - - va nos ser - - va nos mi - sel - - los.
 - - - lis Do - mi - ne . . . ser - - - va nos mi - sel - los.
 Do - mi - ne, Do - mi - - ne ser - va nos . . . mi - sel - los.
 - mi - ne ser - va nos ser - - - - - va nos . . mi - sel - los.

АВТОРЪ ИСКУССТВА.

Y

Many of the compositions of this kind contained in the Dodecachordon are to be admired for the fineness of the harmony, and the artful contexture of the parts, but they smell of the lamp; and it is easy to see that they derive no advantage from an adherence to those rules which constitute the difference between one and the other of the ancient modes. The musicians of the succeeding age totally disregarded them, and laid the foundation of a practice independent of that which Glareanus had taken so much pains to establish, and which allowed of all that exercise for the invention, which in the composition of elegant music must ever be deemed necessary.

The XIIIth chapter of the second book has the following title, 'De Sono in Cælo duæ Opiniones, 'atque inibi Ciceronis Plinijque Loci excussi,' and contains his sentiments on that favourite opinion of the ancients, the music of the spheres, which the author has entered very deeply into, though he cites Aristotle to shew that the whole is a fiction, and thereby has suggested a very good reason for the omission of it in this place.

Chap. XXXIX. entitled 'De inveniendis Tenoribus ad Phonascos Admonitio,' contains advice touching the framing of tenors, of little worth or importance. To illustrate his precepts Glareanus has inserted

three odes of Horace, with the music thereto, of his own composition, which he gives as exemplars of the Dorian, the Phrygian, and Ionian modes.

As to the musicians contemporary with Glareanus, and celebrated by him, short memorials of some of them are dispersed up and down his book; those of whom any interesting particulars are to be collected from other writers will be spoken of hereafter. But he has noticed two that fall not under this latter class, namely, Antonius Brumel and Henricus Isaac, as men of singular eminence: of the latter he thus speaks:—

'HENRICUS ISAAC, a German, is said to have 'learnedly composed innumerable pieces. This 'author chiefly affected the church style; and in his 'works may be perceived a natural force and majesty, 'in general superior to any thing in the compositions 'of this our age, though his style may be said to be 'somewhat rough. He delighted to dwell on one 'immovable note, the rest of the voices running as it 'were about it, and every where resounding as the 'wind is used to play when it puts the waves in 'motion about a rock. This Isaac was also famous 'in Italy, for Politian, a contemporary writer, cele- 'brates him.' The following hymn is given by Glareanus as a specimen of his style and manner:—

CON - - - cep - - - ti - - o Ma - ri - -

CON - cep - ti - - o, Con - - cep - - - ti - o Ma -

CON - cep - ti - o, Con - - eep - ti - o Ma - ri - æ vir - - gi - nis

CON - cep - ti - - - o, Ma - ri - - - - - æ . .

- - æ, Ma - ri - æ vir - - - gi - nis quæ . . nos la - - - - - vit

- - ri - æ vir - - - gi - nis quæ nos la - - - - - vit à la -

quæ nos la - - vit, quæ nos la - - - - - vit

vir - gi - nis quæ . . nos la - - - - - vit à la -

The musical score consists of four staves, each with a vocal part. The lyrics are in Latin and are written below the notes. The first staff begins with 'à la - be cri - - mi - - nis'. The second staff continues with 'be cri - - mi - nis ce - le - bra -'. The third staff has 'à la - - be cri - mi - nis, à la - be cri - mi - nis ce - le - bra -'. The fourth staff concludes with 'be cri - - mi - - nis'. The score includes various musical notations such as clefs, time signatures (3/2 and 3/4), and accidentals.

HENRICUS ISAAC.

Glareanus concludes this elaborate work with a very curious relation of Lewis XII. king of France, to this effect. It seems that that monarch had a very weak thin voice, but being very fond of music, he requested Iodocus Pratensis, the precentor of his choir, to frame a composition, in which he alone might sing a part. The precentor knowing the king to be absolutely ignorant of music, was at first astonished at this request, but after a little consideration promised that he would comply with it. Accordingly he set himself to study, and the next day, when the king after dinner, according to his wonted custom, called for some songs,* the precentor immediately

* The custom of having music at meals seems to have been almost universal in the palaces of kings and other great personages: Theodorice, king of the Goths, as appears from an epistle of his among those of Cassiodorus, understood and loved music; and Sidonius Apollinaris, in that epistle to his friend Agricola, wherein he gives the character of Theodorice, and describes his manner of living, speaks of the sounding of the hydraulic organ, and of those persons who were wont to play on the lyre and other instruments, for the entertainment of princes at their meals. Afterwards, and when in consequence of Guido's improvements, the practice of singing became more general, vocal music upon these occasions took place of instrumental, as appears by the above relation, and the following authentic memorial:—

In Ashmole's History of the Order of the Garter, pag. 404, is an engraving by Hollar after a curious limning on vellum, representing the

produced the composition here subjoined, which being a canon contrived for two boys, might be sung without overpowering the weak voice of the king. The composer had so ordered it, that the king's part should be one holding note, in a pitch proper for a Contratenor, for that was the king's voice. Nor was he inattentive to other particulars, for he contrived his own part, which was the Bass, in such a manner, that every other note he sung was an octave to that of the king, which prevented his majesty from deviating from that single note which he was to intonate. The king was much pleased with the ingenuity of the contrivance, and rewarded the composer.

The following is the canon which Iodocus, or, as the French call him, Josquin or Jnaquin, made upon this occasion:—

manner of sitting at dinner of Ferdinand prince of Spain, on the day of his investiture with the habit and ensigns of the order. In this engraving the prince appears sitting under a canopy with the four commissioners of legation, two on each hand of him; on his left are servants attending, and on his right two men and a boy, each singing out of a music paper, and behind them three other persons, supposed to be also singing.



CHAP. LXXI.

NOTWITHSTANDING the great reputation of Glareanus, the above-mentioned work of his has not escaped the censures of some who seem to have understood the music of the ancients better than himself. The first of these is Giovanni Battista Doni, who in a very learned and entertaining work of his, intitled *De Præstantia Musicæ Veteris*,† accuses him of adopting the errors of modern musurgists, in a work designedly written to expose them; and laments that the author spent twenty years in composing a work entirely useless; and farther he reproves him for asserting that figurate music was arrived at perfection in his time, when it was notorious that it had not then been in use above a hundred years, and must in the nature of things have been susceptible of still farther improvement.

Salinas also, though he bears a very honourable testimony to his erudition, has pointed out some most egregious errors of Glareanus in the Dodecachordon, particularly one in the tenth chapter of

* Anciently princes joined in the choral service, and actually sang the offices in surplices; this is said of Charlemagne, the emperor Otto III. and Henry II. and of Kunigunda, the consort of the latter, by Lustig, in his *Musikkunde*, pag. 259; and to this purpose Bourdelot relates the following story. Lewis IV. being at Tours with his court, about the year 940, some of his courtiers entered into the church of St. Martin at the time of singing the offices, and were much surprised to see there the count of Anjou, Foulques II. in the row of canons, singing the office as they did. The courtiers went and told the king that the count of Anjou was turned priest, and the king was diverted at the relation: at which the count was so disgusted, till-known on the next day he wrote the king a letter, wherein varying the well-known proverb, 'Rex illiteratus, asinus coronatus,' he made use of these words: 'Scaches sire, qu'un roi sans musique est un ane couronné.' The author says that the English, during the troubles in France, had the education of this prince, and purposely brought him up in ignorance, but that notwithstanding he took the reproof in good part, and declared to his courtiers, that they that govern others should be more knowing than those whom they govern. Hist. Mus. et ses Effets, tom. I. pag. 205. An instance of a similar kind is related of Sir Thomas More, viz., that on Sundays, even when he was lord chancellor, he wore a surplice, and sung with the singers at the high-mass and Mattins in the church of Chelsey, which, says the relater, 'the duke of Norfolk on a time finding, said, God bodie, 'God bodie, my lord chancellor a parish clerk! you disgrace the king and your office.' To which his lordship answered in the words of David, 'Villor flam in oculis meis.' Life of Sir Thomas More by his great-grandson Thomas More, Esq. pag. 179. The same story, with a little variation, is related in the life of Sir Thomas More, written by William Roper, and published by Hearne, pag. 29. It appears that before the Reformation the ladies were required to sing in divine service. Among the injunctions of Cardinal Pole published at the end of Hearne's edition of Robert de Avesbury, page 379, is the following: "Item, that the churchwardens of every parish where service was accustomed to sing in the quire in all 'souches as can singe and have been accustomed to singe in the quire in all 'time of selem or before, and now withdrawe themselves in singing or 'serving God there, and if any souch refuse this to do, then the said 'churchwardens to intimate the names of the same amongst other present 'ments to the ordinaire or his chancellor." One of the common recreations in the family of Sir Thomas More was the music of voices, the viol and the organ: see his life by More, page 35—at page 91 he says, he caused his first wife, who was but young, to be taught all kinds of music, and that the second, though inclined to old age, he persuaded to play on the lute, viol, and other instruments, every day performing thereon her task.

† Pag. 17.

his first book, where he asserts the semitone *MI FA* to be the lesser semitone, than which he says there cannot be any thing said more abhorrent to the judgment of sense and reason. He enumerates several other mistakes in this work, but insists most on his constitution of twelve modes, which he not only asserts are not taken according to the doctrine of the ancients, but adds that he did by no means understand the ancient modes; and for this opinion of his, Salinas gives as a reason the confession of Glareanus himself, that he had never read the three books of Ptolemy, nor those of Aristoxenus, nor Manuel Bryennius, nor indeed any of the ancient Greek authors.‡

After so severe a censure as this, it might seem like heaping disgrace on the memory of this author to declare the opinion of other writers with respect to his work; but there is a passage in the notes of Meibomius on Euclid, which it would be an injury to historical truth to suppress. It may be remembered that in a foregoing page Glareanus is said to have asserted that the word *Tone* was scarce used to signify Mode till the time of Boetius, and that the obstinacy of ignorant people had compelled him in the Dodecachordon to accept it in that sense. In answer to this Meibomius says, and indeed with great ingenuity demonstrates, that the term was used by the ancients, and Euclid in particular, long before the time of Boetius, and gives as a reason for it, that originally the modes were three, namely, the Dorian, the Phrygian, and the Lydian; that these, being a superoctave tone distant from each other in succession, acquired the name of *Tones*; and that this term, being once recognized, was applied to the other of the modes, even though some of them were removed from those that next preceded them by a less interval, namely a Semitone. The introduction of Meibomius to his argument is severe, but curious: 'A certain very learned Switzer, but an infant in 'ancient music, set himself in the front of those who 'maintain this opinion, one Glareanus, who, in lib. II. 'cap. ii. of his book, disputes thus, &c.

To say the truth of the Dodecachordon, it is more to be regarded for the classical purity of its style, than for the matter contained in it; though with respect to the former, it is so very prolix, that it is very difficult to give the sense of the author in terms that would not disgust a modern reader; not to say that it abounds with egotisms and digressions, which detract from the merit of it even in this respect; but

‡ De Musica, lib. iv. cap. xxxi. pag. 223.

when we consider the substance of the work, and reflect on the very many erroneous opinions contained in it, the author's confessed ignorance of the sentiments of the ancients, more especially Ptolemy, with respect to the modes, and his endeavour to establish his hypothesis of twelve modes upon a foundation that has given way under him; when all this is considered, the authority of Glareanus will appear of very little weight in matters relating either to the music of the ancients, or that system which is the foundation of modern practice.

In another respect this work must be deemed a great curiosity, for it contains a number of compositions of some of the most eminent musicians of the sixteenth century, many whereof are of that kind of music, in which less regard is paid to the melody than to the harmony and curious contexture of the several parts, and in this view of them they are as perfect models as we may ever hope to see. And besides this, their intrinsic merit, they are to be esteemed on the score of their antiquity; for, excepting a few examples contained in the writings of Franchinus, they are the most ancient musical compositions in symphony any where extant in print.

But here it is to be noted, that the musical compositions of these times derive not the least merit from their being associated to words; nor does it appear that the authors of them had an idea of any power in music, concurrent with that of poetry, to move the passions. This appears in their choice of those hymns and portions of scripture to which musical notes are by them most frequently adapted, which, excepting the *Miserere*, *De Profundis*, *Stabat Mater*, *Regina Cœli*, and a few others, have nothing affecting in the sentiment or expression, but are merely narratory, and incapable, with all the aids of melody and harmony, to excite joy, devotion, pity, or, in short, any other of those affections of the mind which are confessedly under the dominion of music. To give a few instances of this kind; in the second book of the *Dodecachordon* is the *Nicene Creed* in the *Æolian* mode, as it is there called; and in the third is the genealogy of Christ, as it stands in the first chapter of *St. Matthew's Gospel*, set to music by *Iodocus Pratensis*, and given as an exemplar of the *Hypophrygian*. *Doni* has mentioned this latter as an evidence of barbarism, and the ignorance of the musicians of those times with respect to the power and efficacy of their own art. But this defect, namely, the want of energy in their compositions, was but the consequence of those rules which such writers as *Glareanus* had prescribed to them, and these were of such a kind as to exclude all diversity of style: no man could say this or that mass or hymn is the composition of *Jusquin* or *Clement*, of *Gerard*, of *Andrew*, or *Gregory*; they were all of the same tenor, and seemed as if cast in one mould. In short, in the composition of music to words, two things only were attended to, the correspondence of the notes, in respect to time, with the metre or cadence of the syllables, and the rules of harmony, as they referred to the several modes. Whoever is susceptible of the power of music, is able to judge how much it must have suffered by this servile attention to the

supposed practice of the ancients; and will clearly see that it must have suspended the exercise of the inventive faculty, and in short held the imagination in fetters.

From hence it appears that two things are to be objected to the compositions of the fifteenth, and the beginning of the sixteenth century; namely, a choice of words for the subjects of musical compositions, by which no passion of the human mind can be either excited or allayed, and the want of that variety, and those discriminating characteristics of style and manner, which are looked for in the compositions of different masters.

These defects in the music of which we are now speaking, are in some measure to be accounted for by the want of that union and connexion between music and poetry, which was effected by the invention of the musical drama; in the conduct whereof the composers considered their art as subservient to that of the poet, and laboured at a correspondence of sentiment between their music and the words to which it was adapted: and hence we are to date the origin of pathetic music; and were the pathetic the only characteristic of fine music, we might pronounce of that of *Iodocus Pratensis*, *Okenheim*, and others their contemporaries, that it was very little worth, and should resolve those effects which were wrought by it into novelty, and the ignorance of its admirers.

But whoever is capable of contemplating the structure of a vocal composition in a variety of parts, will find abundant reason to admire many of those which *Glareanus* has been at the pains of preserving, and will discover in them fine modulation, a close contexture and interchange of parts, different kinds of motion judiciously contrasted; artful syncopations, and binding concords with discords sweetly prepared and resolved; points that insensibly steal on the ear, and are dismissed at proper intervals; and such a full harmony resulting from the whole, as leaves the ear nothing to expect or wish for: and of these excellencies *Mr. Handel* was so sensible, that he could never object to the compositions of this period any defect but the simplicity of the melody, the restraints on which have been shewn to arise from what were then deemed the fundamental precepts of musical composition.

It is easy to discover that the music here spoken of was calculated only for learned ears. Afterwards, when the number of those who loved music became greater than of them that understood it, the gratification of the former was consulted, passages were invented, and from these sprang up that kind of modulation called *air*, which it is as difficult to define, as to reduce to any rule: this the world were strangers to till they were taught it by the Italian masters, of the most eminent of whom, and the successive improvements made by them, an account will hereafter be given.

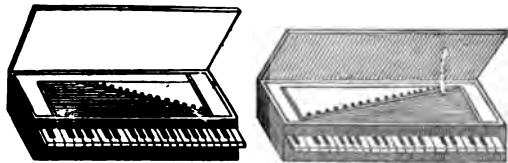
It may be remembered that in the account of *Glareanus* above given, very honourable mention is made of a learned and ingenious Portuguese, a common friend of him and *Erasmus*; the following is his story.

DAMIANUS A' GOËS, a Portuguese knight, distin-



In the course of this work it has been found necessary to attend to the distinction between vocal and instrumental music. The preference which has ever been given to the former, and the slow progress of instrumental music in those ages when the mechanic arts, on which it greatly depends, were in their infancy, has determined the order in which each is to be treated, and will suggest a reason why the priority is given to that species, to the performance whereof the animal organs alone are adequate. Nor was it easy till the period at which we are now arrived, to give any such description of the instruments in general use, as might be depended on. The author of whom we are about to speak has prevented many difficulties that would have interrupted the course of this narration, by giving accurate delineations, which are now to be considered as the prototypes of most of the instruments now in use. Of him and his works the following is an account.

OTTOMARUS LUSCINIUS, a Benedictine monk, and a native of Strasburg, was the author of a treatise intitled *Musurgia*, seu *Praxis Musicae*, published at Strasburg in 1536, in two parts, the first containing a description of the musical instruments in use in his time, and the other the rudiments of the science; to these are added two commentaries, containing the precepts of polyphonous music.* It is a small book, of an oblong quarto size, containing about a hundred pages, and abounds with curious particulars; the *Musurgia* is in the form of a dialogue, in which the interlocutors are Andreas Silvanus, Sebastianus Viridung, sive malis, to use his own expression, Bartholomeus Stoflerus, Ottomarum Luscinius. They meet by accident, and enter into conversation on music, in which Stoflerus, acknowledging the great skill of his friend in the science, desires to be instructed in its precepts, which the other readily consents to. The dialogue is somewhat awkwardly conducted, for though Stoflerus is supposed to be just arrived from a foreign country, and the meeting to be accidental, Luscinius is prepared to receive him with a great basket of musical instruments, which his friend seeing, desires to be made acquainted with its contents. The instruments are severally produced by Luscinius, and he complies with the request of his friend by a discourse, which is no other than a lecture on them. The merit of this book is greatly enhanced by the forms of the several instruments described in it, which are very accurately delineated, and are here also given. In the first class are the plectral instruments, exhibited in this and the following page:—

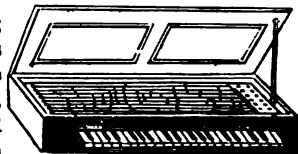


Of the above two instruments it is to be observed,

* Luscinius was a man of considerable learning, and an elegant writer. He translated the *Symposiaca* of Plutarch, and some of the *Orations* of Isocrates into Latin, and wrote Commentaries on the Holy Scriptures. Between him and Erasmus there was some misunderstanding, for the latter complains of Luscinius in one of his Epistles. Jortin's *Life of Erasmus*, vol. II. pag. 723.

that they are both in fact Spinnets, though the latter is by Luscinius termed a Virginal, which is but another name for a small oblong spinnet. Scaliger speaks of the Clavicitherium, which appellation seems to comprehend as well the one as the other of the above instruments, as being much more ancient than the triangular spinnet, or the harpsichord; and indeed the latter seem to be an improvement of the former.

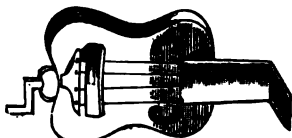
The first of the three following instruments, called by Luscinius a Clavichord, and by others sometimes a Clarichord, is used by the nuns in convents; and that the practitioners on it may not disturb the sisters in the dormitory, the strings are muffled with small bits of fine woollen cloth.



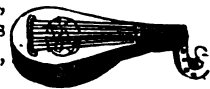
The Clavicimbalum, the next in position to it, is no other than the harpsichord, Clavicimbalum being the common Latin name for that instrument; the strings are here represented in a perpendicular situation; and there is good reason to suppose that the harpsichord was originally so constructed, notwithstanding that the upright harpsichord has of late been obtruded upon the world as a modern invention. There is a very accurate representation of an upright harpsichord in the *Harmonici* of Mersennus, viz., in the tract entitled *De Instrumentis Harmonicis*, lib. I. prop. xlii. and also in Kircher.



The last of the above three instruments is the *Lyra Mendicorum*, exhibited by Mersennus and Kircher; the strings are agitated by the friction of a wheel, which either is or should be rubbed with powder of rosin; all these he says have chords, which being touched with keys, make complete harmony.



There are others he says that require to be stopped at certain distances by the fingers, and of these he gives the following instrument, which he calls *Lutina*, and seems to be a small lute or mandolin, as an example:—



As to the above instrument, both the name and the size import that it is a diminutive of its species; that the lute was in use long before the time of Luscinius there is the clearest evidence in Chaucer and other ancient writers. In Dante is the following passage:—

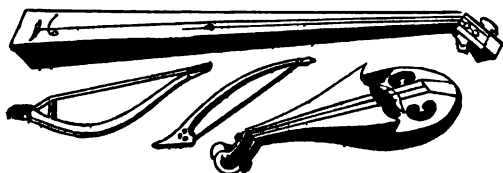
‘Io vidi un fatto à guisa di liuto.’

Inferno, Canto xxx.

to denote the figure of a person swollen with the dropsy. The Theorbo and Arch-lute are of more modern invention, and will be spoken of hereafter.†

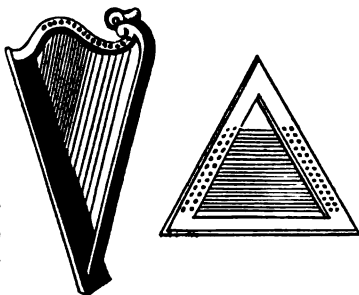
† Salinas asserts that the instruments of the above class take the name of lute from their Halleutic or Boat-like form. *De Musica*, lib. II. cap. xxi. It seems that the word *Ἀλλεὺς* [Alleus] is used by Homer and Plutarch; by the one as applying to a fisherman, by the other for a par-

Those stringed instruments, in which the vibration of the string is caused by the friction of a hair bow, as the following:—

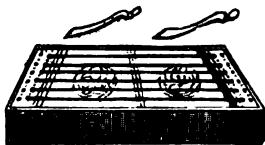


constituta, in the order observed by Luscinius, another class; the first of these instruments is a Monochord, for a reason, which it is very difficult to discover, called the Trumpet Marine. The second, though of a very singular form, can be no other than the treble viol or the violin, for so Ludwig explains the term Geig; * and the third is clearly a species of the Chelys or bass viol. The elder Galilei is of opinion that this instrument was invented by the Italians, or rather in particular by the Neapolitans.†

In another class he places those instruments in which every chord produces a several sound, as do for example the annexed, the latter whereof is no other than a horizontal harp.



The instrument hereunder delineated corresponds exactly with the modern dulcimer; but Luscinius says it is little esteemed, because of the exceeding loudness of its sound. The name given by him to it is Hackbret, a word which in the German language signifies a Hackboard, i. e. a chopping board used by cooks,‡ to which it bears an exact resemblance. It is struck with two small sticks.



After having briefly mentioned these instruments,

particular species of fish, vide Scop. Lex. Art. Αλγ, and Lento is the Italian word for a lute: the etymology is singular, and wants authority, and is the rather to be doubted, because Vincentio Galilei in the most express terms ascribes the invention of the lute to the English, and adds that in England lutes were made in great perfection, though some persons in his time gave the preference to those made in the neighbourhood of Brescia. The same author observes that the lute is but little used in Germany, and gives this strange reason for it, that that country is so cold, that the inhabitants cannot stir out of their rooms, which are heated with stoves, for eight months in the year. By this it should seem that no person who does not go much abroad can be a proficient on the lute. He had never heard perhaps that Luther, who lived much in his study, played very shrewly on this instrument; and that upon his being summoned to render an account of his doctrines before the diet of Worms, in order to compose and calm his mind, he spent the greater part of the night preceding his appearance there, at his lute.

* Vide Jun. Etymol. Angl. Voce Grooms. This word suggests the derivation of that other, Jige, the name of an air or tune peculiarly adapted to the instruments of this class.

† Dial. dell Mus. pag. 147.

‡ Ludwig's German Lexicon.

Luscinius proceeds to describe those from which sound is produced by the means of air; those he says claim the first place that are acted upon by bellows, which force the air into them, and when filled, answer a touch of the finger with a musical sound. These instruments he adds, as they are more costly than others, so they exceed all others in harmony. He says that other instruments are for the use and pleasure of men, but that these are generally dedicated to the service of God.

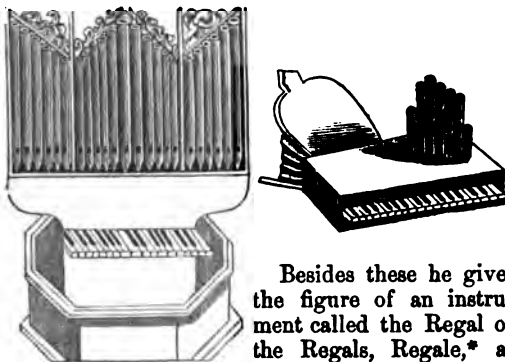
Stoflerus upon this remarks, that the organ is almost every where made use of in divine service; and that our religious worship is no way inferior to that of the ancient Romans, which was always celebrated with music. As a proof whereof he says it is recorded that when Caius Junius, Publius Terentius, and Quintus Æmilius were consuls, the Tibicines employed in the public worship, being prohibited eating in the temple of Jove, went away in a body to the city of Tibur; the senate, growing impatient of their absence, besought the inhabitants of that city to give them up, and the Tibicines were summoned to appear in the senate-house, but they refused to obey. Upon this the Tiburtines had recourse to a stratagem; they invited them to a musical entertainment, and made them drunk, and while they were asleep threw them into a waggon and sent them to Rome, and on the morrow they found themselves in the midst of the Forum. The populace hearing of their arrival ran to meet them, and by their tears, and an assurance that they should be permitted to eat in the temple of Jove, prevailed on them to return to their duty.

This relation of Stoflerus leads him to ask the opinion of his friend upon this question, whether music has a tendency to corrupt the minds of those that apply themselves closely to the study of it, or not?

To this Luscinius answers, that no one was ever yet so senseless as to separate music from the other liberal arts, the great end whereof is to recommend integrity of life. He adds that the Pythagoreans deemed it one of the chief incentives to virtue; and that were any person of his time to make a catalogue of excellent musicians whom music itself had estranged from every vice, he would begin from Paul Hofhaimer, a man born in the Alps, not far from Saltsburg. But his character will be best given in the words of Luscinius himself, which are these: 'He has received great honours from the emperor Maximilian, whom he delights as often as he plays upon the organ. Nor is he more remarkable for skill in his profession, than for the extensiveness of his genius, and the greatness of his mind. Rome owes not more to Romulus or Camillus, than the musical world does to Paulus. To speak of his compositions, they are neither so long as to be tedious, nor does the brevity of them leave ought to be wished for: all is full and open, nothing jejune, or frigid, or languishing. His style is not only learned but pleasant, florid, and amazingly copious, and withal correct, and this great man during thirty years, has suffered no one to exceed, or even equal him. In a word, what

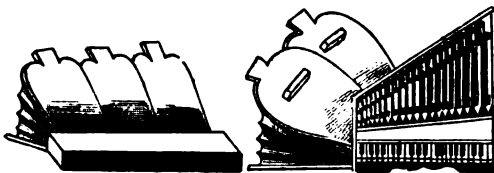
Quintilian says of Cicero I think is now come to pass; and a person may judge of his own proficiency in music according as he approves of the compositions of Paul, and labours day and night to imitate them. This Paul has had many disciples, who are every where very honourably supported, and conduct our church in large cities and public places. Of these there are several, whom I am very intimate with, and reverence for their great ingenuity and purity of manners, to wit, Johannes Buschner, at Constance, Joannes Kotter, Argentius of Bern, Conrade of Spire, Schachingerus of Padua, Bolfgangus of Vienna, Johannes Coloniensis, at the court of the duke of Saxony, and many others whom I pass over, as having no intimacy with them; I think it is of great importance in delivering the precepts of any art to give an account of its several professors, that a learner may know whom he ought to imitate, and whose examples he should follow.'

After this eulogium on his friend Hofhaimer, Luscinius proceeds in his description of the organ, of which he says there are two kinds, the Portative and the Positive, the first whereof, as its name imports, capable of being carried about like other musical instruments, the other fixed as those are in churches. The figures of both are thus delineated by Luscinius:—



Besides these he gives the figure of an instrument called the Regal or the Regals, Regale,* as

here represented:—



* REGALE, sorta di strumento simile all'organo, ma minore. Altieri, *Dizion. Ital. ed. Ingl.* Lord Bacon distinguishes between the regal and the organ in a manner which shews them to be instruments of the same class. 'The sounds that produce tones, are ever from such bodies as have their parts and pores equal, as are the nightingale pipes of regals or organs.' *Nat. Hist. Cent. II. Sect. 102.* But notwithstanding these authorities, the appellation Regal has given great trouble to the lexicographers, whose sentiments with regard to its significations are here collected, and brought into one point of view.

Skinner, upon the authority of an old English dictionary, conjectures the word Regals, or Regals, to signify a stringed instrument, namely a clavicord; possibly founding his opinion on the nature of the office of tuner of the regals, and not knowing that such wind instruments as the organ need frequent tuning, as do the clavicord and other stringed instruments. It is highly probable that the word Regal is a corruption of Rigabello, of which take the following explanation from Sir Henry Spelman: 'In æde sancti Raphaelis Venetie, instrumenti musici cujusdam forma extat, ei nomen Rigabello; cujus in ecclesiis

This it seems is a kind of diminutive portable organ, and is at this day in common use in many parts of Germany. The second of the above figures represents the instrument entire, the first the bellows and wind-chest in a state of disunion from it. In an account of queen Elizabeth's annual expence, published by Peck in his *Desiderata Curiosa*, vol. I. lib. II. page 12, among the musicians and players there occur 'Makers of instruments two,' which in a note on the passage are said to be an organ-maker and a rigall-maker, the former with a fee or salary of twenty, the latter with one of ten pounds a year: and in the lists of the establishment of his majesty's royal chapels is an officer called Tuner of the Regals, whose business at this day is to keep the organ of the royal chapel in tune.

Having dispatched those instruments which are rendered sonorous by means of wind collected and

'usus fuerit ante organa illa pneumatica quae hodie usurpantur.' *Sansovinus, lib. VI. Descript. Venetiarum.* That is to say, in the church of St. Raphael at Venice was to be seen the figure of a musical instrument called a Rigabello, anciently used in churches instead of the organ.

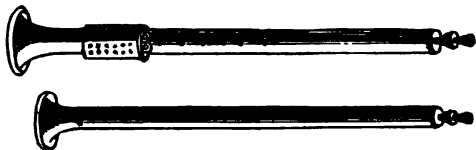
Walther is more particular in his description of the Regal: he makes it to be a reed-work in an organ, with metal and also wooden pipes and bellows adapted to it, so contrived, as that it may be taken out, and set upon a chest or table. He says that the name Regal is frequently given to that stop in an organ called the Vox humana; and in this sense Merseus uses it in his *Harmonie Universelle*, lib. VI. Des. Organs, Prop. VIII. As touching the use of the Regal, the following is the account which a very ingenious organ-maker, a German, now living in London, gives of it. 'In Germany, and other parts of Europe, on Corpus Christi and other festivals, processions are made, in which a regal is borne through the streets on the shoulders of a man: wherever the procession stops the instrument is set down on a stool, and some one of the train steps forward and plays on it, he that carried it blowing the bellows.' The same person says he once repaired a regal, so contrived as to shut up and form a cushion, which when open discovered the pipes and keys on one side, and the bellows and wind-chest on the other. Walther adds to his description of this instrument, from Michael Prætorius, that the name of it is supposed to have arisen from the circumstance of its having been presented by the inventor to some king. 'Regale, quasi dignum regi. Regium vel regale opus.'

These authorities, and the representation of it by Luscinius, seem sufficient to prove that the regal is a pneumatic, and not a stringed instrument.

But Merseus relates that the Flemings invented an instrument, les Regales de Bois, consisting of seventeen cylindrical pieces of wood, decreasing gradually in length, so as to produce a succession of tones and semitones in the diatonic series, which had keys, and was played on as a spinnet, the hint whereof he says was taken from an instrument in use among the Turks, consisting of twelve wooden cylinders, of different lengths, strung together, which being suspended, and struck with a stick having a ball at the end, produced music. *Harm. Universelle*, lib. III. pag. 175.

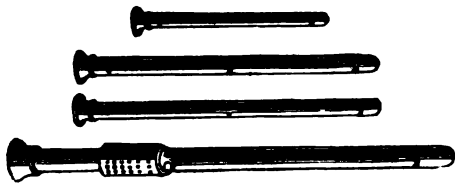
Ligon, in his *History of Barbadoes*, pag. 48, relates a pretty story of an Indian, who having a musical ear, by the mere force of his genius invented an instrument composed of wooden billets, yielding music, and nearly corresponding with those above described, for speaking of the music of the islanders he says, 'I found Macow [the negro] very apt to it of himself, and one day coming into the house (which none of the negroes use to do, unless an officer as he was) he found me playing on a Theorbo, and singing to it, which he hearkened very attentively to; and when I had done took the Theorbo in his hand, and strooke one string, stopping it by degrees upon every fret, and finding the notes to vary till it came to the body of the instrument, and that the nearer the body of the instrument he stooped, the smaller or higher the sound was, which he found was by the shortening the string; considered with himself how he might make some trial of this experiment upon such an instrument as he could come by, having no hope ever to have any instrument of this kind to practise on. In a day or two after, walking in the plantine grove, to refresh me in that cool shade, and to delight myself with the sight of those plants, which are so beautiful, as though they left a fresh impression in me when I parted with them, yet upon a review something is discern'd in their beauty more than I remembered at parting, which caused me to make often repair thither: I found this negro (whose office it was to attend there, being the keeper of that grove,) sitting on the ground, and before him a piece of large timber, upon which he had laid cross six billets, and having a hand-saw and a hatchet by him, would cut the billets by little and little, till he had brought them to the tunes he would fit them to; for the shorter they were the higher the notes, which he tried by knocking upon the ends of them with a stick which he had in his hand. When I found him at it I took the stick out of his hand and tried the sound, finding the six billets to have six distinct notes one above another, which put me in a wonder how he of himself should without teaching do so much. I then shewed him the difference between flats and sharps, which he presently apprehended, as between ♯ and ♮; and he would have cut five more billets to those tunes, but I had then no time to see it done, and so left him to his own enquiries. I say this much to let you see that some of these people are capable of learning arts.'

forced into them by bellows, he speaks of such as are filled with air blown into them by the mouth ; and of these he gives a great number, particularly the Schalmey, *i. e.* Chalameau, and Bombardt, flutes of various kinds, cornets, the Cornamusa, or bagpipe, and some other instruments, for which no other than German names can be found, all which are hereunder represented, according to their respective classes.



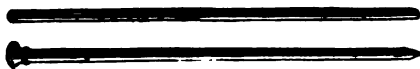
The second of the two instruments above delineated is the Schalmey, so called from Calamus a reed, which is a part of it ; the other called Bombardt is the bass to the former ; these instruments have been improved by the French into the Hautboy and Bassoon.

Next follow flutes of various sizes, all of which, bating the simplicity of their form, as being devoid of ornaments, seem to bear an exact resemblance to the flute à bec,* or, as it is called, the common English flute. Whether this instrument be of English invention or not, is hard to say. Galilei calls it Flauto dritto, in contradistinction to the Flauto traverso, and adds it was brought into Italy by the French. Notwithstanding which, Mersennus scruples not to term it the English flute, calling the other the Helvetian flute, and takes occasion to mention one John Price, an Englishman, as an excellent performer on it.† The word Flute is derived from Fluta, the Latin for a Lamprey or small eel taken in the Sicilian seas, having seven holes, the precise number of those in front of the flute, on each side, immediately below the gills. Luscinius has thus represented this species :—



The largest instrument of the four is the bass flute.

These are succeeded by two other flutes, the first called the Schuuegel, the other the Zuuerchpfeiff ; the former bears a resemblance to the traverse or German flute, though it is much slenderer and does not agree with it in number of holes :—



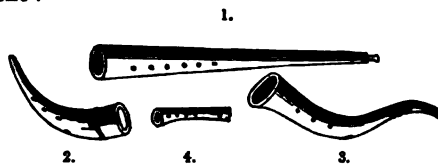
It seems that the invention of the traverse flute is not to be attributed either to the Germans or the Helvetians, notwithstanding that the elder Galilei and Mersennus ascribe it to the latter ; the well-known antique statue of the piping faun seems to be a proof of the contrary ; and there is now extant an engraving

* Bxc is an old Gaulish word, signifying the beak of a bird or fowl ; but more especially a cock. Menage in articulo. The term Flute à bec must therefore signify the Beaked Flute, an epithet which appears upon comparing it with the traverse flute, to be very proper.

† Harmonic. De Instrumentis Harmonicis, lib. II. prop. II. vi.

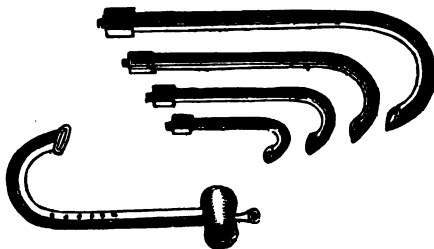
on a very large scale published some years ago, of a tessellated pavement of a temple of Fortuna Virilis, erected by Sylla at Rome, in which is a representation of a young man playing on a traverse pipe, with an aperture to receive his breath, exactly corresponding with the German flute.

Of the Zuuerchpfeiff, the second of the above instruments, no satisfactory account can be given. Luscinius next exhibits the forms of four other wind instruments, namely, 1. The Ruspfeiff. 2. The Krumhorn. 3. The Gensen horn. And 4. The Zincke :—



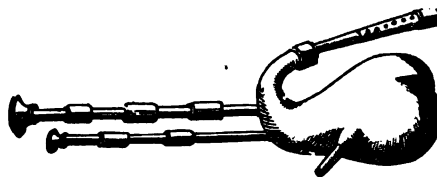
By the name of the first nothing more is meant than the black-pipe, Rus in the German language signifying Black, and Pfeiff a Pipe. The word Krumhorn is compounded of the adjective krum, *i. e.* crooked, and horn, and signifies a cornet or small shawm ; and it is said that the stop in an organ called the Principal answers to it. Gema, in the German language, signifies the Shamoy or wild goat ; and this appellation denotes the Gensen horn. Zincken are the small branches on the head of a deer, and therefore it is to be supposed that the instrument here called the Zincke is little better than a child's toy, or in short a whistle.‡

Luscinius gives the Krumhorn in a more artificial form, that is to say, with the addition of a reed, or something like it, at one end, the other being contorted to nearly a semicircle, with regular perforations, as here :—



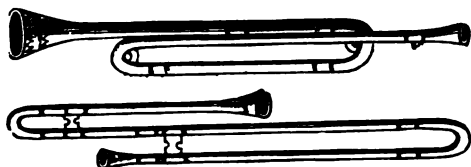
But for these, as also for the Platerspil, the lowest in position of the instruments above delineated, the bare representation of them must here suffice.

The Cornamusa, or Bagpipe, is in the German language very properly termed the Sackpfeiff, *i. e.* the Sack-pipe ; its figure is thus given :—



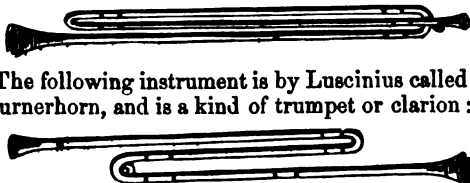
‡ The names and descriptions of these several instruments instruct us as to the nature and design of many stops in the organ, and what they are intended to imitate. To instance in the Krumhorn ; the tone of it originally resembled that of a small cornet, though many ignorant

Luscinus next speaks of certain ductile tubes of brass, meaning thereby the trumpet species, though in strictness of speech the *Tuba Ductilis* signifies the *Sacbut*. Bross 226. The first he terms the *Busaun*, and is probably the sackbut or bass trumpet, and the second the *Felt*, i. e. the field or army trumpet :—

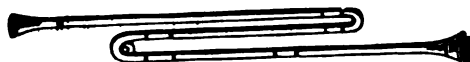


Vincentio Galilei says that the trumpet was invented at Nuremberg, an assertion not reconcilable to the general opinion of its antiquity. Brossard calls it the most noble of the ancient portative instruments; but it is highly probable that Galilei means the brazen trumpet; and that Brossard had a more general idea of it is evident from his making the word *Tromba* synonymous with *Buccina*, which means a trumpet made of the horn of an ox; and if so there is no great disagreement between the two authors.

The *Claret* which is next given by Luscinus, may mean the *Clarion*, an instrument of the same form, but smaller, and consequently of a more acute sound than the trumpet :—



The following instrument is by Luscinus called the *Thurnerhorn*, and is a kind of trumpet or clarion :—



From hence he descends to bells, and even to the anvil and hammers, by means whereof Pythagoras is said to have investigated the consonances. He then proceeds to treat of the pulsatile instruments, at the head whereof he places the common, or side, and kettle-drums. The drum is said by *Le Clerc* to be an Oriental invention; and he adds, that the Arabians, or rather perhaps the Moors, brought it into Spain.

And these are followed by the bugle or hunting-horn,* a pot, with a stick, a contorted horn, the Jew's harp, and some other instruments of less note.

organ-makers have corrupted the word into *Cremona*, supposing it to be an imitation of the *Cremona* violin. The *Gemsen* horn and *Busaun*, corrupted into *Buzain*, answering to the *sacbut*, are to be found in many great organs in Germany, as is also the *Zinke* corruptly spelt *Cink*.

* *Brellz* from the Saxon *bugan*, *curvare*, *arcuare*, signifies a thing bowed or bent. Vide *Jun. Etymol.* A basket-maker calls the curved handle or bale of a basket, a bugle.

It is probable that the hint of the stick and salt-box, *Merry Andrew's*



From hence he digresses to the Jewish instruments mentioned by *St. Jerome*, in an epistle of his to *Dardanus*, of a very awkward form, and as to their construction inexplicable.

The description of the musical instruments contained in this first book of the *Musurgia* leads *Stofferus* into an enquiry into their use, the explanation whereof, the nature of the consonances, and the signification of the several characters, are the subject of the second book, which containing nothing remarkable, it is needless to abridge.

CHAP. LXXII.

NOTWITHSTANDING the great variety of instruments extant at the time when *Luscinus* wrote his *Musurgia*, there is very little reason to suppose that what we now call a concert of music, altogether instrumental, was then known. The first of this kind were symphonic compositions, mostly for viols of different sizes, called *Fantazias*,† and these continued till about the middle of the seventeenth century, when they gave way to a much more elegant species of composition, the *Sonata di Chiesa*, and the *Sonata di Camera*; the first of these, as being adapted to church-service, was grave and solemn, consisting of slow movements, intermixed with fugues; the other admitted of a variety of airs to regular measures, such as the *Allemande*, the *Courant*, the *Saraband*,

instrument to divert the mob, was taken from the pot and stick above represented.

To this description of the musical instruments by *Ottomar* *Luscinus* that contained in the *Orbis Sensualium Pictus* of *Johannes Amos Comenius* may be considered as a supplement, the brevity of which latter is amply atoned for by its perspicuity. *Comenius's* design in this little work was to instruct youth as well by sensible images, as the names of things; and under the article of Musical Instruments he has given the names and uses of thirty, with as precise a delineation of their respective forms as half a page of a small volume would allow of. The following character of this inestimable little book in the *Sculptura* of *Mr. Evelyn* exhibits but a faint representation of its excellence; speaking of the arts of sculpture, and their tendency to facilitate instruction, he says: 'What a specimen of this *Jo. Amos Comenius* in his *Orbis Sensualium Pictus* gives us in a Nomenclator of all the fundamental things and actions of men in the whole world, is public; and I do boldly affirm it to be a piece of such excellent use, as that the like was never extant; however it comes not yet to be perceived.' *Sculptura*, or the History of Chalcography, chap. V.

Comenius was a native of Moravia, and flourished in the middle of the last century. He came into England in the year 1641, upon an invitation to assist in a plan for a reformation in the method of instructing youth, but the troubles of the times drove him from hence to Sweden, where he was favourably entertained and patronized by count *Oxenstierna*. *Bayle*, art. *COMENIUS*, has given upon the whole an unfavourable account of him, representing him as an enthusiast in religion, and a friend of *Madam Bourignon*; neither of which particulars admitting them to be true, detract from the merit of his writings, nor indeed from his general character, which is that of a very learned, ingenious, and pious man. He died at Amsterdam in the year 1671, being then eighty years of age.

† In the *Harm. Universelle* of *Morænnus*, *Des Instrumens à Vent*. 277, is a *Fantasia* for cornets in five parts by the *Sieur Henry le Jeune*, but it seems to have been composed about the time that *Fantazias* began to be disused.

and others, of which there are numberless examples in the works of the Italian masters; these were succeeded by the concerto, which is nothing more than a sonata in four parts, with a reduplication of some of them, so as to make the whole number nominally seven.

The earliest intimation touching the origin of instrumental music in parts, is contained in a book written by Thomas à Sancta Maria, a Spanish Dominican, and published at Valladolid in 1570, intitled '*Arte de tanner fantasia para tecla, viguela y todo instrumendo de tres o quatro ordenes.*' From hence, and because neither Franchinus, Glareanus, nor even Luscinius himself, have intimated to the contrary, it may be concluded that the instrumental music of their time was either solitary, or at most unisonous with the voice: and with respect to vocal harmony, it seems to have been so appropriated to the service of the church, as to leave it a question whether it was ever used at public festivities. It however continued not long under this restraint, for no sooner were the principles of counterpoint established and disseminated, as they were by the writings of Franchinus, Glareanus, and the other authors herein before-mentioned, than harmony began to make its way into the palaces of princes and the houses of the nobility; and of this the story above related of Lewis XII. and his Phonascus Iodocus Pratenensis contains a proof; and at this period the distinction between Olerical, or ecclesiastical, and Secular music seems to have taken its rise. At Rome the former was cultivated with a degree of assiduity proportioned to the zeal of the pontiffs, and the advantages which the science had derived from the lectures and writings of Franchinus: and in England it was studied with the same view, namely, the service of religion. The strictness of our own countrymen must indeed appear very remarkable in this respect, for if we judge from the compositions of the succession of English musicians, from John of Dunstable, who died in 1455, to Taverner, who flourished about 1525, it must seem that their attention was engrossed by the framing of masses, antiphons, and hymns; no other than compositions of this kind being to be found in those collections of their works which are yet remaining, either in the public libraries or other repositories. It has already been related that the Germans, to whom may be added the inhabitants of the several parts of Switzerland, were among the first that cultivated the art of practical composition; when this is recollected, it may induce an acquiescence in an opinion which otherwise might admit of a doubt, namely, that vocal concerts had their rise in the Low Countries, or rather in those parts of Flanders, which about the middle of the sixteenth century were under the dominion of the emperor of Germany. The fact is thus to be accounted for; the crown of Spain had received a great accession of wealth and power by its conquests in America in the preceding century; and Charles V. king of Spain and emperor of Germany, favouring the disposition of the inhabitants of the Low Countries, which led them to trade and merchandise, not only made the city of Brussels the

place of residence for himself and his court, but by the encouragement he gave to traffic, and other means, so ordered it, that a considerable portion of his revenues centered in this part of his dominions as a bank from whence it was circulated through all Europe. The splendour and magnificence of his court, and the consequent encouragement of men of genius to settle there, drew together a number of men of the greatest eminence in all professions, but more especially musicians. Of some of the most famous of these particular mention is made by Lodovico Guicciardini, the nephew of the Italian historian of that name, in a work of his entitled '*Descrittione di tutti i Paesi Bassi,*' printed at Antwerp in 1556 and in 1581. In this book the author speaks of the flourishing state of the Low Countries, the wealth of the inhabitants, and the perfection to which the arts had arrived there, in the enumeration whereof he speaks thus of music. '*Questi sono i veri maestri della musica, e quelli che l'hanno restaurata, e ridotta a perfettione, perche l'hanno tanto propria e naturale, che huomini e donne cantan naturalmente a misura, con grandissima gratia e melodia, onde poi giunta l'arte alla natura, fanno e di voce, e di tutti gli strumenti quella pruova e harmonia, che si vede e ode, talche se ne truova sempre per tutte le Corti de Principi Christiani.*'

The masters celebrated by this author as the great improvers of music are, Jusquin di Pres, Obrecht, Ockegem, Ricciafort, Adriano Willaert, Giovanni Mouton, Verdelot, Gomberto, Lupus lupi, Cortois, Crequilon, Clemente non Papa, and Cornelio Canis, who, he says, were all dead before the time of writing his book; but he adds that they were succeeded by a great number of others, as namely, Cipriano di Rore, Gian le Coick, Filippo de Monti, Orlando di Lasso, Mancicourt, Jusquino Baston, Christiano Hollando, Giaches di Waert, Bonmarche, Severino Cornetto, Piero du Hot, Gherardo di Tornout, Huberto Waelrant, and Giachetto di Berckem, who were settled at Antwerp, and in other parts of Flanders, and were in the highest reputation for skill and ingenuity. This account given by Guicciardini of the flourishing state of music in the Low Countries is confirmed by Thuanus, who, in an eulogium on Orlando de Lasso, takes occasion to observe that in his time Belgium abounded with excellent musicians.

Besides that these men were favoured by their prince, they received considerable encouragement in the prosecution of their studies from the most opulent of the inhabitants, who at that time were both Merchants and Courtiers. Of the magnificence and liberality of which class of men such stories are related as must seem incredible to those who are not acquainted with the history of that period. Some idea may be formed of the grandeur and dignity of the mercantile character in the sixteenth century from the extensive commerce of Gresham and Sutton, our countrymen, the former of whom is said, by means of his correspondence and connexions, to have drained the bank of Genoa, and thereby retarded the Spanish invasion for two years; and the other to have covered

the sea with his ships. Rembrandt's famous print of the gold-weighter encompassed with casks of coined gold, which he computes not by tale, but weight, suggests such an idea of enormous wealth, as makes the traders of the present time appear like pedlars; but the fact is, that the merchants in the ages preceding were but few in number, and that in consequence of their interest and intelligence, their knowledge in the living languages, and perhaps for other reasons, they had free access to princes, and held the rank of courtiers.*

The author above-cited, speaking of the city of Antwerp, the great mart of Europe, and of the numerous resort of merchants of all countries thither, takes occasion to speak of the Foccheri, or Fuggers, of Augsburg, three brothers of the same family, the eldest named Anthony, and the second Raimond, all merchants, whom he mentions as rivalling the highest nobility in Europe in riches, magnificence, and liberality. Of the first a judgment may be formed from the journal of our Edward VI. printed in Burnet's History of the Reformation, wherein appear so many minutes of negotiations with the Fuggers, for the loan of large sums of money, that he seems to have had more dependance on them than on his own treasury. In the journal above-mentioned the Foulacre is the term by which the copartnership or house of these three men is to be understood. Sir John Hayward approaching somewhat nearer to the true orthography, calls it the Foulker. From the minutes in the journal it appears that the rate of interest taken by them was ten in the hundred, which, according to Sir John Hayward's account, was four per cent. under the usual rate of interest at that time,† and that Thomas Gresham was the principal negotiator of these loans, in all which there appears to have been the most punctual and honourable dealing, as well on the part of the Fuggers, as of the king.‡

* Discretione, pag. 42.

The evidence of this fact is contained in a very curious book, supposed to have been written in the twelfth century, by a Norwegian nobleman, in the Icelandic language, and from thence translated into Danish and Latin, with the title of *Speculum Regale*, and published at Soroe by Halfdan Elnersen, a professor there, in 1768, in a quarto volume. It is a system of policy adapted to the age in which it was originally composed, with a view to the four professions or occupations of the greatest importance to a state, that is to say, the merchant, the lawyer, the divine, and the husbandman or farmer.

Under the first head are contained the instructions of a father to his son, touching the means of advancing his fortunes, in which he exhorts him to betake himself to the profession of a merchant, and in order thereto, to acquire a competent skill in the mathematics, particularly arithmetic and astronomy; in the law, and in the Latin and Walloon languages, and to visit foreign countries. He advises him also to be splendid in his apparel and equipage, magnificent in his entertainments, and to be careful that his table be 'covered with a clean cloth;' to be liberal in his expenses, and, above all, to appear frequently at courts, where, says he, merchants are considered as the satellites of princes, to whom they are frequently appointed agents or procurators. He also asserts that no one can become a Courtier unless he hath travelled as a Merchant to foreign countries.

It is a not little curious to observe how Guicciardini's account of the state of the Low Countries in his time, falls in with the sentiments of the author of the *Speculum Regale*, and that evidence of the truth of his assertions should subelst, notwithstanding the natural vicissitude of things, four hundred years after he wrote; for Guicciardini relates that the catholic king (Philip II.), the king of Portugal, and the queen of England disdained not to receive merchants into their company, but employed them in mercantile negotiations, calling them their factors. He says that the catholic king had two, Gaspar Schets and Gian Lopes; the king of Portugal one, Francesco Pesoa; and the queen of England one, namely, Messer Tommaso Grassano, cavaliere, &c. Sir Thomas Gresham, a man much honoured, 'il quale parimente con sufficiente procura, ha levato per lei di questa borsa grosse somme di denari e le va ricapitando nobilmente.' Descript. pag. 170.

† Life and Reign of king Edw. VI. quarto, pag. 154.

‡ Vide Collection of Records, &c. referred to in the second part of Burnet's Hist. Reform. pag. 25. 27. 46. 48. 53.

Roger Ascham, in a letter to a friend of his at Cambridge, dated 20 Jan. 1551, from Augsburg, says, 'There be five merchants in this town thought able to disburse as much ready money as five of the greatest kings in Christendom. The emperor would have borrowed money of one of them, the merchant said he might spare "ten hundred thousand guilders," and the emperor would have had eighteen; a guilder is 3s. 6d. These merchants are three brethren Fuccurs, two brethren Bamgartner. § One of the Fuccurs doth lodge, and hath done all the year, in his house the emperor, the king of the Romans, the prince of Spain, and the queen of Hungary, regent of Flanders, which is here, besides his family and children. His house is covered with copper.' Ascham's Works published by James Bennet, pag. 376.

Bayle says of these men that they had rendered themselves illustrious by their liberalities to men of letters: they made great offers to Erasmus, and presented him with a silver cup.

Luther takes notice of their amazing wealth, and says the Fuggers and the money-changers of Augsburg lent the emperor at one time eight and twenty tons of gold, and that one of them left eighty tons at his death.†

Bayle also celebrates the magnificence and generosity of these brethren, and tells the following story of them: 'The Fuggeri, celebrated German merchants, to testify their gratitude to Charles V. who had done them the honour to lodge in their house when he passed through Augsburg, one day, amongst other acts of magnificence, laid upon the hearth a large bundle of cinnamon, a merchandize then of great price, and lighted it with a note of hand of the emperor for a considerable sum which they had lent him.' ¶

Farther, the riches of this family were so great as to be the subject of a proverb, which Cervantes himself puts in the mouth of his hero, for when Don Quixote is giving a fictitious account of his adventures in the cave of Montesinos, he relates that his mistress Dulcinea had sent a damsel to request of him the loan of six reals upon the pawn of her dimity petticoat, and that he dismissed the messenger with

§ Of the family of Bamgartner or Paumgartner an account is given pag. 314, in not.

¶ Colloquia Mensalia, pag. 86.

¶ It is probable that this story gave occasion to the following stanza in the old ballad of Whittington:—

'More his fame to advance,
'Thoufands he lent his king
'To maintain wars in France,
'Glory from thence to bring:
'And after at a feast,
'Which he the king did make,
'He burnt the bonds all in jest,
'And would no money take.

The author whereof, unwilling that his hero should be outdone by any foreign merchant, has engrafted this story into his narration, upon the bare supposition that under the like circumstances Whittington would have shewn as much loyalty and liberality as the Fugger, he being indeed a prodigy of wealth and munificence, and one of the many ancient citizens of London, whose good deeds have rendered them as honour to their country, and to human nature itself. See an account of him in Stowe's Survey, tit. Honour of Citizens and Worthinesse of Men.

Sir Richard Whittington was thrice mayor of London, viz., in the years 1397, 1406, and 1419, but the ballad above-cited can hardly be more ancient than the time of queen Elizabeth.

four, which was all that he had, saying to her,* 'Sweetheart, tell your lady that I am grieved to my 'soul at her distresses, and wish I were a Fugger† 'to remedy them.'

The above facts imply liberality, and, to say the truth, a disposition not quite so commendable; but the nobleness and grandeur of their spirit was manifested in the erection of sumptuous edifices,‡ and by their patronage of learned and ingenious men in all professions; and the benefits thence arising were enjoyed by the scholars, the painters, sculptors, goldsmiths, engravers, and musicians of that day, in common with other artists. To what degree the musicians in particular were thought to merit encouragement, may in some measure be collected from the passage above referred to in Guicciardini; but their title to it will best appear from the account hereafter given of them, and the works by them severally published.

Guicciardini has taken frequent occasion to mention the pompous service in the great church of Antwerp, and in other churches of Flanders, celebrated with voices and instruments of various kinds. Compositions of this sort may well be supposed to have employed the masters residing there; but it was not in the study of these alone that they were engaged: concerts of instrumental music, as has already been mentioned, were then scarcely known; but vocal music in parts was not only the entertainment of persons of rank at public solemnities, but was so much the customary amusement at social meetings, and in private families, that every well-educated person of either sex was supposed capable of joining in it. Castiglione, who lived about this time, mentions this as one of the necessary accomplishments of his courtier, and requires of him to be able to sing his part at sight,§ which, when the nature of the vocal compositions then in practice is explained, will appear to have been no very difficult matter.

By that convivial kind of harmony above spoken of, is to be understood a musical composition of three or more parts for different voices, adapted to the words of some short but elegant poem, and known by the name of the Madrigal.|| The Italian language

* 'Amiga mía, à vuestra senora, que à mí me pesa en el alma de sus 'trabajos, y que quisiera sèr un Fucár para remediarlos.' Don Quixote, part II. lib. VI. cap. xxiii.

† See Article "Fugger," *Morer's Dictionary* edition, 1740.

‡ Beatus Rhenanus, in a letter to a friend, gives a description of the magnificent houses, or rather palaces, of Anthony and Raimond Fugger; and a late traveller speaks of a memorial of their opulence yet remaining, that is to say, a quarter in the city of Augsburg called the Fuggery, consisting of several streets and fair palaces built by them. *Journey over Europe* by A. D. Chancel, octavo, Lond. 1714, pag. 96.

§ II Corteg, lib. II.

|| It is very difficult to say from whence this word is derived. Kircher laboured in vain to find an etymology for it. The bishop of Avranches. Huet, in his treatise *De l'Origine des Romains*, supposes it to be a corruption of the word Martegaux, a name given to the ancient inhabitants of a particular district of Provence, who were probably the inventors of, or excelled in this particular species of musical composition. Had he known that there is in Spain a town named Madrigal, it is likely he would have deduced its origin from the Spaniards.

Doni, who is clear that the Madrigal came originally from the Provençals, is nevertheless at a great loss for the derivation of the word, and gives his reader the choice of two etymologies, the best of which seems to be the Italian word Mandra, a flock, a herd, a sheep fold: and even against this it is objected that pastoral manners are not peculiar to this kind of poetical composition. Crescimbeni, in his *Commentary* *Intorno all' Istoria della volgare Poesia*, vol. I. lib. II. cap. 22, has taken up the enquiry, but leaves the matter nearly where he found it; and so indeed does Mattheson, who wrote some years after him. Better success

was at this time generally understood throughout Europe; its fitness for music entitled it to a preference above all others, and the sonnets of Petrarch, and other of the old Italian poets, to which in the preceding ages the barbarous melodies of the Provençal minstrels had been adapted, were looked on as the most eligible subjects for musical composition; and to render these delightful, the powers of melody and harmony were by some of the first class of masters mentioned by Guicciardini, very successfully employed.

It cannot be supposed that the first essays of this kind had much to recommend them besides the correctness of the harmony, which was just and natural, and yet these had their charms: Anne Boleyn, a lively and well accomplished young woman, and who had lived some years in France, doted on the compositions of Jusquin and Mouton, and had collections of them made for the private practice of herself and her maiden companions; but the best of these fell very far short of those of the succeeding age.

The excellence of this species of musical composition, the madrigal, may be inferred from this circumstance, that it kept its ground even long after the introduction of music on the theatres; for dramatic music, or what is now called the opera, had its rise about the year 1600, and it is well known that one of the finest works of Stradella, who was contemporary with our Purcell, is the madrigal for five voices, 'Clori son fido amante.'

Of some of the masters mentioned by Guicciardini, in the passage above-cited, there are particulars extant which may be thought worth relating; and first of Jusquin, so often mentioned by Glareanus and others of his time, by the name of IODOCUS PRATENSIS.

In that short account given of him by Walther, in his Lexicon, it is said that he was born in the Low Countries, but in what part thereof is not known, though his name Pratensis, bespeaks him a native of Prato, a town in Tuscany. He was a disciple of Johannes Ockegem, or Okenheim, and for his excellence in his art was appointed master of the chapel to Lewis XII. king of France. Salinas says he was universally allowed to be the best musician of his time. Glareanus is lavish in his commendation, and has given the following account of him: 'Iodocus 'Pratensis, or Jusquin de Prez, was the principal 'of the musicians of his time, and possessed of a degree 'of wit and ingenuity scarce ever before heard of. 'Some pleasant stories are related of him before he 'came to be known in the world, amongst many 'others the following may deserve a recital. Lewis 'XII. king of France had promised him some eccle-

has attended the enquiries into the origin and history of this species of composition. Doni fixes the invention of it to the commencement of the fifteenth century. *Trattato della Melodie*, pag. 97. And Mattheson acquiesces in this opinion, and asserts that Anselmo de Parma, Marchetto de Padovana, Prosdocimus Beldimandini, and other musicians, who are but barely named by Franchinus, were the first composers of madrigals; and that Iodocus Pratensis, Joannes Mouton, Gombert, and others, brought this style to perfection. Volkomenon Capel-meister, pag. 79. In both these particulars Mattheson seems to be mistaken; for neither does it appear that these early musicians composed madrigals, nor were they brought to perfection by Iodocus and the rest named by him. Those that perfected this style were Orlando de Lassus, Philippo de Monte, Cypriano de Rore, among the Flemings, and of the Italians, Palestrina, Pomponio Nenna, and his disciple the admirable Carlo Gesualdo, prince of Venosa.

‘siastical preferment; but the promise was forgot (as too often happens in kings’ courts) Jusquin being much disturbed in mind, composed a Psalm beginning “Memor esto verbi tui servo tuo,” but with such elegance and majesty, that when it was carried to the king’s chapel, and there justly performed, it excited universal admiration. The king, who heard it, blushed for shame; and as it were did not dare to defer the performance of his promise, but gave him the benefice. He then having experienced the liberality of this prince, composed another psalm by way of thanksgiving, beginning “Bonitatem fecisti cum servo tuo Domine.” As to those two pieces of harmony, it may be observed how much more the hopes of reward incited his genius in the former, than the attainment of it did in the other.’

The Dodecachordon contains also some extracts from a mass of his composing, intitled *L’Homme armé*, which indeed is celebrated by Luscinius, Salinas, and many other authors. Besides these a great number of his compositions are contained in the Dodecachordon, and among others, that in which, notwithstanding the adage of Erasmus above-mentioned, he has ventured in a *De Profundis* for four voices to pass from the Dorian to the Phrygian mode.

Notwithstanding the favour in which he stood with Lewis XII. it seems that Jusquin in his latter days experienced a sorrowful reverse of fortune. In the *Sopplimenti Musicali* of Zarlino, pag. 314, is the following sonnet of Serasino Acquilano to that purpose:—

Giosquin non dir che'l ciel sia crudo ed empio,
Che t'adornò de sì sublime ingegno:
Et s'alcun veste ben, lascia lo sdegno;
Che di ciò gode alcun buffone, ò sempio.

Da quel ch'io ti dirò prendi l'esempio;
L'argento e l'or, che da se stessi è degno,
Si mostra nudo, è sol si veste il legno,
Quando s'adorna alcun theatro ò tempio:
Il favor di costai vien presto manco,
E mille volte il dì, sia pur giocondo,
Si muta il stato lor di nero in bianco.
Mi chi hà virtù, gira à suo modo il mondo;
Com' huom che nuota ed hà la zucca al fianco,
Mettil' sott' acqua pur, non teme il fondo.

Walther, from the *Athenæ Belgicæ* of Swertius, cites the following epitaph on him:—

O mors inevitabilis!
Mors amara, mors crudelis
Josquinum dum necasti
Illum nobis abstulisti;
Qui suam per harmoniam
Illustravit ecclesiam,
Propterea dic tu musice:
Requiescat in pace. Amen.

Castiglione relates a story which bespeaks the high opinion entertained by the world of Jusquin's character as a musician. He says that at a certain time some verses were produced to the duchess of Urbino as of the composition of Sannazaro, which were applauded as excellent; but that as soon as it was discovered that they were not really his, they were condemned as worse than indifferent; so likewise says he a motet sung before the same duchess met with little approbation till it was known to be of the composition of Josquin de Prez.*

The following motett of Iodocus Pratensis, containing a canon of two in one, occurs in the Dodecachordon, and is here inserted as a specimen of his style and abilities as a composer:—

* Il Corteg. lib. II.

CANON DUO IN UNO.

O Je - su Fi - li Da -
O Je - su Fi - li Da - - vid mi - - - se - re - re me -
O Je - su
O Je - su Fi - li Da - - - vid mi - - - se - re - -
- - vid mi - - se - re - - re me - - - i,
- - - i, mi - - se - re - re me - i, mi - se - re - - - re me -
Fi - li Da - - vid mi - se - re - - re me - - -
- - - re me - - - i, mi - - se - re - re me -

Fi - - li - a me - - a ma - le á de - mo - ni -
i, Fi - - li - a me - a ma - - - le á de - mo - ni - o
- i, Fi - - - li - a me - - a ma -
- - i Fi - li - a me - - - a á de - mo - - ni

- o vex - a - - tur nam et ca - tel - li e -
vex - a - - - tur, nam - et ca - tel - - li e - -
- le á de - mo - ni o vex - - a - - tur, nam et ca -
- - o vex - a . . . tur,

- dunt de mi - cis quæ ca - - - dunt de
- dunt de mi - cis quæ ca - - - dunt de men -
- tel - li e - - dunt de mi - cis quæ ca - - - dunt
nam et ca - tel - li e - dunt de mi - - - cis quæ

men - - - sa do - - - mi - no
- sa do - mi - no - - - rum su -
de men - - - sa do -
ca - - - dunt de men - - sa

- rum su - - o - - - rum O mu - li - er mag -
- o - - - rum O mu - - lier mag - - na
- mi - no - - - rum su - - o - -
do - mi - no - - - rum su - - o - - rum, z O

na est Fi - des tu - a.
est Fi - des tu - a.
rum, O mu-li - er mag - na est Fi - des tu - a,
mu - lier mag - na est Fi - des tu - a.

IODOCUS PRATENSIS.

CHAP. LXXIII.

JACOBUS HOBRECHTH, a Fleming, is celebrated for his great skill and judgment, and is said by Glareanus to have been possessed of such a degree of strength and celerity of invention, as that he composed a whole mass, and a very excellent one, in a night's time, to the admiration of the learned. The same author asserts that all the monuments that are left of his composition have in them a wonderful majesty; and that he did not, like Jusquin, affect unusual passages, but gave his compositions to the public without disguise, trusting for the applause of his auditors to their own intrinsic merit.* He was preceptor in music to Erasmus.†

JOHANNES OCKEGEM, or as Glareanus calls him, Okenheim, was also a native of the Low Countries, and as he was the preceptor of Iodocus Pratensis, must be supposed to be somewhat more ancient than

his disciple. Glareanus mentions a composition of his for thirty-six voices, which, though he had never seen it, he says, had the reputation of being admirable for its contrivance. In the composition of Fugue he is said to have been excellent; Glareanus says he affected to compose songs that might be sung in different modes, and recommends to the notice of his reader the following fugue for three voices, which, though said by him to be in the *Epidiatessaron*, or fourth below, is in truth in the *Epidiapente* or fifth below after a perfect time. It should seem by the different signatures at the head of each stave, that this was intended as an example of a *cantus* to be sung in different modes.

Ambrose Wilphlingsederus of Nuremberg was at the pains of resolving this intricate composition, and published it in his *Erotemata Musices Practicæ* printed in 1563. The canon and resolution are here given together:—

FUGA IN EPIDIAPENTE

8 8 8

RESOLUTION.

* Dodecachordon, pag. 456.

† Ibid.



JOHANNES OKENHEIM.

Antimo Liberati, a musician of the last century, and a singer in the pontifical chapel, says that, taking their example from the schools of those two great men Okenheim and Iodocus Pratensis, many foreign masters erected musical academies in different kingdoms and provinces, the first of whom was Gaudio Mell, a Fleming, who instituted at Rome a noble and excellent school for music, in which many pupils were instructed in the science, and among them Gio.

Pier Luigi Palestrina.* The truth of this relation, so far as it regards the name of Palestrina's preceptor, is very questionable, and will be the subject of a future enquiry.

About this time flourished ADRIANO WILLAERT, a native of Bruges; this person was intended for the profession of a lawyer, and studied in that faculty in the university of Paris, but an irresistible propensity

* Lettera scritta dal Sig. Antimo Liberati in risposta ad una del Sig. Ovidio Persapegi, Roma, 1655.

to music diverted his attention from the law, and engaged him deeply in the study of that science; upon his quitting Paris he went for improvement to Italy, and by the favour of pope Leo X. became, to use the style of Zarlino and other writers, 'Maestro 'di Cappella della serenissima Signoria di Venetia;*' by which appellation is to be understood master of the choir of the church of St. Mark. He seems to have been the inventor of compositions for two or more choirs, that is to say, those wherein the offices are sung alternately by several chorusses, the effect whereof is at this day sufficiently understood.† Artusi, Doni, Printz, and other writers speak of Willaert in general terms as a mere practical musician, a composer of motets, madrigals, and airs, among whom they however admit he holds the first rank; but Zarlino, who was his disciple, and consequently must have been intimately acquainted with him, relates that he was incessantly employed in making calculations and devising diagrams for demonstrating the principles of harmony, and, in short, represents him as the ablest theorist of the age. It is highly probable that this was his true character; and the particulars above related may in a great measure account for that extreme propensity which Zarlino throughout his voluminous works discovers for that branch of musical science. His master had made him sensible of its value, and had given a direction to the studies of his disciple, who in return has taken every occasion to celebrate his praises, and to transmit to posterity in the character of Adrian Willaert, an exemplar of a consummate musician.

There are extant of Willaert's composition, Psalmi Vespertini omnium Dierum Festorum per Annum,

4 Vocum, 1557; Motettæ 6 Vocum, published in 1542; Cantiones Musicae, seu Motettæ, cum aliis ejusdem Cantionibus Italicis 4, 5, 6, et 7 Vocum; and Villanellæ Neapolitanæ 4 Vocum, published together in 1588, and other works.‡ He is sufficiently known to those who are conversant with the Italian writers on music, by the name of Messer Adriano.

A few of the most excellent of Willaert's motets are pointed out in the Istitutioni Harmoniche of Zarlino, terza parte, cap. lxvi. and are there celebrated as some of the finest compositions of that time. His doctrines and opinions respecting some of the most abstruse questions in music are delivered with great accuracy in the Dimostrazioni of Zarlino. He was very much afflicted with the gout, but seems by Zarlino's account of him to have nevertheless retained the exercise of his mental faculties in all their vigour, and to have rendered himself singularly remarkable for his modesty, affability, and friendly disposition towards all who professed to love or understand music.§

The Dimostrazioni of Zarlino, of which a particular account will in its place be given, are a series of dialogues tending to illustrate the Institutes of the same author. The interlocutors in these are Francesco Viola, an eminent musician and maestro di cappella to Alphonso duke of Ferrara; Claudio Merulo, organist of the great church at Parma; Adrian Willaert, and Zarlino himself. In the course of these dialogues many particulars occur from whence an adequate idea may be formed of Willaert, of whom Zarlino scruples not to say, as indeed do most that speak of him, that he was the first musician of his time.

The following motet is of his composition:—

QUEM di-cunt ho-mi - nes es - se fi - li - um ho - mi -

QUEM di-cunt ho-mi-nes . . .

QUEM di-cunt ho-mi - nes es - se fi - li - um ho - mi - nes, es -

nis, es - se fi - li - um ho - mi - nis re-spondens Pe - trus

es - se fi - li - um ho - mi - nis re-spondens Pe - trus dix -

se fi - li - um ho-mi-nis ho - mi - nis re-spon-dens Pe -

QUEM di-cunt ho-mi - nes es - se fi - li - um ho-mi - nis re-spon-dens Pe -

* Walth. Lex. in Art. Zarl. Ragion. pag. 1. 8.

† Walth. Lex. in Art.

‡ Zarl. Istitut. 346. Documenti Armonici di Angelo Berardi lib. I. pag. 78.

§ Zarl. Dimostrazioni passim.

dix - it Tu es Christus Fi - li -
 - it Tu es Christ - us Fi - li - us De - i vi -
 trus dix - it Tu es Christus Fi - li - us De - -
 - trus dix - it Tu es Christus Fi - li - us De - i vi - vi

us De - i vi - vi et a - it Je - sus Be -
 - vi et a - it Je - sus Be - a -
 - i vi - vi et a - it Je - sus Be - a - tus es Si - mon
 et a - it Je - sus

a - tus es, be - a - tus es Simon Pe - tre qui - a ca -
 - tus es Si - mon Pe - tre qui - a ca - ro et san
 Pe - tre, Pe - tre qui - a ca - ro . . .
 Be - a - tus es Si - mon Pe - tre

ro et san - guis, san - guis non re - ve -
 - guis non re - ve - la - vit ti - bi
 et san - guis non re - ve - la - vit ti - bi, non
 qui - a ca - ro et san - guis non re - ve - la - vit ti -

la - vit ti - bi sed Pa - ter me - us qui est in Coe -
 sed Pa - ter me - us qui est in Coe - lis, in Coe - lis, in Coe -
 re - ve - la - vit ti - bi sed Pa - ter me - us qui est in Coe -
 bi sed Pa - ter me - us qui est in Coe

- - - lis et E - go di - co ti - bi
 - - - lis et E - go di - co ti - bi qui - a tu es
 - - - lis et E - go di - co ti - bi
 - - - lis et E - go di - co ti - bi qui - a tu

qui - a tu es Pe - trus et su - per hanc Pe - - -
 Pe - - - trus et su - per hanc Pe - tram et su - per hanc
 qui - a tu es Pe - trus et su - per hanc Pe -
 es Pe - - - trus

- tram e - di - fi - ca -
 Pe - - - tram e - di - fi - ca - bo ec - cle - si - am me - - -
 - tram e - di - fi - ca - bo ec - - cle - si - am me - am,
 et su - per hanc Pe - - tram e - di - fi - ca -

bo ec - cle - - si - am me - - - am. Al - le - lu -
 - - - am. Al - le - lu - ia, . . .
 ec - cle - - si - am me - - am. Al - le - lu -
 - bo ec - cle - - si - am me - am. Al - le - lu - ia, Al - le - lu - ia,

ia, Al - le - lu - ia, Al - le - lu - ia, . . . Al - le - lu - - ia. . .
 . . . Al - le - lu - ia, . . . Al - le - lu - ia, Al - le - lu - - ia.
 - - ia, Al - le - lu - ia, . . . Al - le - lu - - ia, Al - le - lu - ia.
 Al - le - lu - ia, Al - le - lu - ia, Al - le - lu - ia, Al - le - lu - ia.

ADRIANO WILLIART.

CHAP. LXXIV.

JOHANNES MOUTON, a disciple of Adrian Willaert, was Maestro di Capella to Francis I. king of France,* and, by the testimony of his contemporaries, was one

of the greatest musicians of the age he lived in. He composed many masses, which were highly approved by Leo X. A Miserere for four voices of his composition is to be found in the Dodecachordon of Glareanus, as is also the following hymn.

SAL - VE Ma - ter Sal - va -

SAL - VE Ma - ter Sal - va - tor

- tor - is, Sal - ve Ma - ter Sal

SAL - VE Ma - ter Sal - va -

- is, Sal - va - tor - is, Sal - va -

SAL - VE Ma - ter Sal - va - tor

- va - tor - is, vas e - lec -

- va - tor - is, vas e - lec - tum, vas

- tor - is, Sal - va - tor - is, vas

- is, vas e - lec - tum, vas ho - nor -

- tum, vas ho - nor - is,

ho - nor - is, vas mi - se -

e - lec - tum, vas ho - nor - is, vas ho - nor -

- is, vas mi - se - ri - cor

* This prince, as he was a great lover and encourager of learning and the liberal arts, was peculiarly fond of music. In the memoirs of Mr. De la Fôret, ambassador from Francis I. to Solymán II. emperor of the Turks, for concluding a treaty between those two princes, in the year 1543, it is related that the king designing to do a pleasure to his new ally, sent him a band of most accomplished musicians, making him, as he thought, a present worthy of his grandeur. Solymán received them very civilly, and was entertained by them with three different concerts at his palace, in presence of all his court; he shewed himself greatly pleased with the music, but having observed that it tended to enervate his mind, he judged by himself that it might make still a greater im-

pression upon that of his courtiers. He much applauded the musicians; nevertheless, as he was apprehensive that music might occasion, in consequence of its establishment, as much disorder in his empire as would be caused by a permission of the use of wine, he sent back the musicians with a handsome reward, after having ordered all their instruments to be broken, with a prohibition against their settling in his empire upon pain of death. Solymán thoroughly believed it to be a stroke of policy in Francis I., for he told the French ambassador that he imagined his master had sent him this amusement to divert him from the business of war, just as the Greeks sent the Persians the game of chess to slacken their military ardour. *Histoire de la Musique et ses Effets*, tom. I. pag. 212.

vas mi - se - ri cor - di - æ sis pro no -

ri - cor di - æ sis pro no -

is vas mi - se - ri - cor - di - æ sis

di - æ sis pro no - bis, pro no -

bis fons . . . ve - ni - æ, fons . . . ve - ni - æ.

bis, pro no - bis fons ve - ni - æ, fons ve - ni - æ.

pro no - bis fons . . . ve - ni - æ.

bis fons ve - ni - æ, fons ve - ni - æ, fons ve - ni - æ.

JOHANNES MOUTON.

THOMAS CREQUILON, a Fleming, was master of the chapel to the emperor Charles V. about the year 1556. He composed hymns for many voices, and some French songs in four, five, and six parts.

CLEMENS, otherwise JACOB CLEMENS NON PAPA, a Fleming, was one of the musicians of the emperor Charles V. and a composer of masses and other sacred offices. It seems that this prince, though not an avowed patron of the arts, as was his rival Francis I. was a lover of music. Ascham, in the letter above-cited, relates that being at Augsburg, he stood by the emperor's table, and that 'his chapel sung wonderful cunningly all the dinner-while.*

CYPRIAN DE RORE was born at Mechlin, but lived great part of his time in Italy. He composed many very fine madrigals to Italian words. There is extant

in the great church of Parma the following sepulchral inscription to his memory:—

Cypriano Roro, Flandro
artis musicæ
viro omnium peritissimo,
cujus nomen fama que
nec vetustate obrui
nec oblivione deleri poterit,
Herculis Ferrariens. Ducis II.
deinde Venetorum,
postremo
Octavi Farnesi Parmæ et Placentiæ
Ducis II. Chori Præfecto,
Ludovicus frater, fil. et hæredes
mœstissimè posuerunt.
Obiit anno M.D.LXV. ætatis XLIX.

The following madrigal is given as a specimen of his abilities in that style of musical composition:—

AN - COR chè col par - ti - re io mi sen - to mo - ri -

AN - COR chè col par - ti - re io . . mi sen - to mo - ri -

AN - COR chè col par - ti - re io mi sen - to mo -

AN-COR chè col par - ti - re io mi sen - to mo -

* The same author gives the following humorous account of the behaviour of the emperor at dinner: 'He had four courses, he had sod beef, very good roast mutton, baked hare; these be no service in England. The emperor hath a good face, a constant look; he fed well of a capon; I have had a better from mine hostess Barnes many times

'in my chamber. He and Ferdinando eat together, very handsomely carving themselves where they list, without any curiosity. The emperor drank the best that ever I saw; he had his head in the glass five times as long as any of us, and never drank less than a good quart at 'once of Rhenish wine.' Ascham's Works, pag. 373.

- re par-tir vor-rei ogn' or o-gni mo-men-to tan-t'il pia-cer che sen - -
 - re par-tir vor-rei ogn' or ogn' or o-gni momen-to tan-t'il piacerch'io sen-to
 - ri - - re par-tir vor-rei ogn' or o-gni mo-men-to tan-t'il pia -
 - ri - re par-tir vor-rei ogn' or o-gni mo-men-to tan - -

- to tan-t'il piacer che sen-to del-la vi - - ta ch'ac -
 tan-t'il pia-cer che sen-to del-la vi - - ta ch'ac-qui -
 - cer che sen-to tan-t'il piacerch'io sen-to del-la vi-ta ch'ac -
 - t'il piacer che sen-to tan-t'il pia-cerch'io sen-to del-la vi-ta ch'ac -

- quis-to . . nel ri-tor - - no . . e co-si mille e mil-le
 - - to nel ri-tor - - no e co-si mil-le e mil-le volte il
 - quis-to nel ri-tor - - no e co-si mille e mil-le volte il gior -
 - quis-to nel . . ri-tor - - no e co-si, e -

volte il gior-no mille e mil-le volte il gior-no par-tir da voi vor-re -
 gior-no e co-si mille e mil-le volte il gior-no par-tir da voi vor-re -
 - no mille e mil-le volte il gior-no mille e mil-le volte il gior-no par-tir . . da voi . . vor-re -
 co-si mille e mil-le vol-te mille e mil-le volte il gior-no par-tir da voi vor -

- i . . . tan-to son dol-ci gli ri-tor - - ni mie -
 - i tan-to son dol-ci, tan-to son dol-ci gli . . ri-tor -
 - i tan-to son dol-ci gli ri-tor-ni
 - re - i tan-to son dol-ci, tan-to son dol-ci gli . . ri-tor-ni

- - i e co - si mille e mil-le volte il gior - no, mille e mil-le volte il
 - ni mie - i e co - si mille e mille e volte il gior - no e co - si mil -
 mie - i e co - si mille e mil-le volte il gior - no, mille e mil - le volte il gior-no, mille e
 mie - - i e co - si mille e mil-le vol - te,

gior - no par - tir da voi vor - re - - i . . .
 - le e mil - le volte - il gior - no par - tir da voi vor re - - i tan - to son dol -
 mil - le vol - te gior - no par - tir . . da voi . . vor - re - - i
 mille e mil - le volte il gior - no par - tir da voi vor - re - - i tan - to son dol -

tan - to son dol - ci gli ri - tor - - ni mie - - i.
 - ci tan - to son dol - ci gli ri - tor - ni mie - - i.
 tan - to son dol - ci, tan - to son dol - ci gli . . ri - tor - ni mie - - i.
 - ci, tan - to son dol - ci gli . . ri - tor - ni mie - - i.

CIPRIANO DE RORE.

PHILIPPUS DE MONTE, (*a Portrait*.) a native of Mons in Hainault, born in 1521, was master of the chapel to the emperor Maximilian II. a canon, and treasurer of the cathedral church of Cambray. In that church was a portrait of him, with the following distich under it :—

Cernimus excelsum, mente arte, et nomine Montem,
 Quo Musæ et Charites constituere domum.

The print given of him is taken from it, and is to be found in the Bibliotheca Chalcographica of Boissard. He composed, besides masses and motets, four books of madrigals, of which the following is one :—

DA bei ra - mi scen - de - a dol - ce nel - la me - mo - ria
 DA bei ra - mi scen - de - a dol - ce nel - la me - mo - ria u -
 DA bei ra - mi scen - de - a dol - ce nel - la me - mo - ria u -
 DA bei ra - mi scen - de - a dol - ce nel - la me - mo - ria u -

u - na piog - gia di fior sov - r' il suo grem - - - bo ed el - la

na piog - gia di fior sov - ra il suo grem - bo sov - r' il suo grem - - bo ed el - la

na piog - gia di fior sov - ra il suo grem - bo, il suo grem - - - bo ed el - la

na piog - gia di fior sov - ra il su - - o grem - - - - - bo ed el - la

si se - de - a u - mil in tan - ta glo - ria co - per - ta gia dell' a - mo - -

si se - de - a u - mil in tan - ta glo - ria co - per - ta gia dell' a - mo - ro - so dell' .

si se - de - a u - mil in tan - ta glo - ria co - per - ta gia dell' a - mo - ro - so nem -

si se - de - a u - mil in tan - ta glo - ria co - per - ta gia dell' a - mo - ro - - -

ro - - so nem - bo qual fior ca - dea sul lem -

a - mo - ro - so nem - - bo qual fior ca - dea sul lem - bo, qual fior ca - dea sul lem -

- - bo a - mo - ro - so nem - - bo qual fior ca - dea sul lem - bo, qual fior ca - dea sul lem -

- - so nem - - - - bo qual fior ca - dea sul lem - bo,

bo qual sul - le trec - cie bion - - de ch'O - ro for - bi - to e per - le e -

- bo qual sul - le trec - cie bi - on - de qual sul - le trec - cie bion - de ch'O - ro for - bi - to e per - le e

- bo qual sul - le trec - cie bion - de qual sul - le trec - cie bion - de ch'O - ro for - bi - to e per - le e -

qual sul - le trec - cie bion - de qual sul - le trec - cie bion - de ch'O - ro for - bi - to e per - le e -

ran quel dia ve - der - le qual si po - sa - vain ter - ra e . . . qual sul' on - -

ran quel dia ve - der - le qual si po - sa - vain ter - ra e qual sul' on - de, e

ran quel dia ve - der - le qual si po - sa - - - vain ter - ra e qual . . . sul' on - de e

ran quel dia ve - der - le qual si po - sa - vain ter - ra e qual sul' on - de e

de qual con un va - go . . er-ro - re gi -
 qual sul' on - de qual con un va - go er-ro - re qual con un . . va-go er - ro - re gi -
 qual sul' on - de qual con un va-go er-ro - re qual con . . un vago er-ro - re gi - ran -
 qual sul' on - de qual con un va-go er - ro - . . . re gi -

- ran - do pa - rea dir qui re - gn'A - mo - re, gi - ran - do
 - rando pa - rea dir qui re - gn'A - mo - re, gi - ran - do
 - do pa-re a dir qui re - gn'A - mo - re, gi - ran - do
 - ran - do pa - rea dir qui re - gn'A - mo - re, gi - ran - do

pa - rea dir qui re - gn'A - mo - re, A - mo - re.
 pa - rea dir qui re - gn'A - mo - re, qui re - gn'A - mo - re.
 pa - rea dir qui re - gn'A - mo - re, A - mo - re, . . qui re - gn'A - mo - re.
 - pa - rea dir qui re - gn'A - mo - re, qui re - gn'A - mo - re.

FILIPPO DE MONTE.

ORLANDUS LASSUS, (*a Portrait*,) otherwise called Orlando de Lasso, was also a native of the city of Mons above-mentioned, a contemporary and intimate friend of Philippo de Monte. He, for the sweetness of his voice while he was a child, and his excellent compositions in his riper years, may be said to have been the delight of all Europe. Thuanus, in his history, gives the following account of him: 'Orlandus Lassus, a man the most famous of any in our age for skill in the science of music, was born at Mons in Hainault; for this is the chief praise of Belgium, that it among other nations abounds in excellent teachers of the musical art. And he, while a boy, as is the fate of excellent singers, was, on account of the sweetness of his voice forced away, and for some time retained by Ferdinand Gonzaga in Sicily, in Milan, and at Naples. Afterwards, being grown up, he taught for the space of two years at Rome. After this he travelled to France and Italy with Julius Cæsar Brancatius, and at length returned into Flanders, and lived many years at Antwerp,

'from whence he was called away by Albert duke of Bavaria, and settled at that court, and there married. He was afterwards invited with offers of great rewards by Charles IX. king of France, to take upon him the office of his chapel-master, for that generous prince always retained a chosen one about him. In order to reap the benefit of this promotion, he set out with his family for France, but, before he could arrive there, was stopped by the news of the sudden death of Charles; upon which he was recalled to Bavaria by William the son and successor of Albert, to the same duty as he had before discharged under his father: and having rendered himself most famous for his compositions both sacred and profane, in all languages, published in several cities for the space of twenty-five years, he died a mature death in the year 1595, on the third of June, having exceeded seventy-three years of age.

The account given by Thuanus does by no means agree either in respect to the time of his birth or

de, oh d'a-ma-ris-si-me on - - - de, trist' Amaril-li mi - a,
 - de, oh d'a-ma-ris-si-me on-de, trist' A-ma-ril-li mi - a, trist' Amaril-li mi - - -
 - me on-de, oh d'a-ma-ris-si-me on-de, trist' Amaril-li mi - - a, trist' Ama-
 d'a-ma-ris-sime on-de, trist' Ama-ril-li mi - - a, trist' Amaril-li
 - de, oh d'a-ma-ris-si-me on - - - de, trist' Ama-

trist' A-maril-li mi - a, trist' Ama-ril-li mi - - - a, di pian-to gra -
 - a, trist' Amaril-li mi - - - a, di pian-to gra - -
 - ril-li mi - a, trist' A-ma-ril-li mi - a, trist' Amaril-li mi - a, di pian-to gra -
 mi - a, trist' Amaril-li mia, A-ma-ril-li mi - a, di pian-to
 - ril-li mia trist' Ama-ril-li mi - a, trist' A-maril-li mi - a, di pian-to gra - -

- ve la tua ca-ra e soa-ve del-la dot-ta Mi-ner-va a -
 - ve la tua ca-ra e soa-ve del-la dot-ta Mi-ner-va a-ma-te fron - -
 - ve la tua ca-ra e soa-ve del-la dot-ta Mi-ner-va amate
 - gra-ve la tu-a ca-rae soa-ve del-la dot-ta Mi-ner-va a-ma-te
 - ve la tua ca-ra e soa-ve del-la dot-ta Mi-ner-va amate

- ma-te fron - - - de o-ve che piu . . le bion-de, chio - - me
 - de o-ve che piu le bion-de, . . chio - - me non t'ing hir -
 fron-de o-ve che piu le bion-de, chio - me non t'ing hir-lan-da e
 fron-de o-ve che piu le bion-de, chio - - - me
 fron-de o-ve che piu le bion-de, chio - - - me non

non t'ing hir - lan - da e non ti strin - ge, e non ti strin - ge, chi se n'a - dor - na e
 - - lan - da e non ti strin - ge, non t'ing hir lan - da e non ti strin - - ge, chi se n'a - dor - na e cin -
 non ti strin - ge, non t'ing hir lan - da e non ti strin - - ge, chi se n'a - dor - na
 non t'ing hir - lan - da e non ti strin - ge, chi se n'a - dor - -
 t'ing hir lan - da e non ti strin - ge, e non ti strin - - ge,

cin - - ge, ohi - - me, ohi - me, fiam - ma no - vel - la ve - di -
 - - ge, ohi - me, ohi - - me, fiam - ma no - vel - - la
 e cin - ge, ohi - me, ohi - me, fiam - ma no - vel - la ve - di - la come n'ar - -
 - na e cin - ge, ohi - me, fiam - ma no - vel - la ve - di - la come n'ar -
 ohi - me, ohi - me, fiam - ma no - vel - la ve - di - la come

la co - me n'ar - de, ve - di - la come n'ar - de, ve - di - la come n'ar - - de, vedi -
 ve - di - la come n'ar - de, ve - di - la co - me n'ar - de, vedi - la come n'ar -
 - de, ve - di - la come n'ar - de, ve - di - la come n'ar - de, vedi - la
 - de, ve - di - la come n'ar - de, ve - di - la come n'ar - de, ve - di - la come n'ar - de,
 n'ar - - de, ve - di - la come n'ar - de, vedi - la come

la co - me n'ar - - de e si fa bel - la ohi - - me,
 de ve - di - la co - me n'ar - de e si fa bel - la ohi - - me ohi -
 co - me n'ar - - de e si fa bel - la ohi - me, ohi
 e si . . . e . . . fa bel - - la ohi - - me, ohi
 n'ar - de e si fa bel - - la ohi - - me, ohi -

ohi - me fiam - ma no - vel - - la ve - di - la co - men'ar - de, ve - di - la come
 - - me fiam - ma no - vel - - - la ve - di - la come n'ar - de, ve - di -
 - - me fiamma no - vel - la ve - di - la co - me n'ar - - de, ve - di - la
 - - me fiamma no - vel - la ve - di - la co - me n'ar - de, ve - di - la come n'ar - de,
 - me fiamma no - vel - la ve - di - la co - me n'ar - - de,
 n'ar - de ve - di - la come n'ar - - - de, ve - di - la come n'ar - -
 - - la co - men'ar - de, ve - di - la co - men'ar - de, ve - di - la come n'ar - de, e
 come n'ar - de, ve - di - la come n'ar - de, ve - di - la come n'ar - - de, e -
 ve - di - la come, n'ar - de, ve - di - la . . . n'ar - de, e si -
 ve - di - la come n'ar - de, ve - di - la come n'ar - de, e si fa bel - -
 - de, e si fa bel - - la ve - di - la come n'ar - de, e si fa bel - - la.
 si fa bel - la ve - di - la co - men'ar - de, e si fa bel - la. . . .
 . . . si fa bel - la ve - di - la co - me n'ar - de, e si fa bel - la. . . .
 . . . fa bel - - - la
 - - - la ve - di - la co - me n'ar - de e si fa bel - la.

ORLANDO DE LASSO.

CHAP. LXXV.

THE other masters mentioned by Guicciardini, namely, Gombert, Curtois, Cornelio Canis, Mancicourt, Jusquin Baston, Christian Holland, Giaches de Waert, Bonmarche, Severin Cornet, Piero du Hot, Gerard Turnhout, Hubert Waelrant, and Giachetto di Berckem, and the rest of those not particularly here characterised, were of somewhat less note; there are however extant some madrigals of Severin Cornet and Giaches de Waert, which shew them to have been eminently skilled in their profession.

From the foregoing deduction of the progress of

music, it appears that the Flemings, more than any people in Europe, had contributed to bring it to a standard of purity and elegance; and that towards the latter end of the sixteenth century the Low Countries abounded with professors of the science, who in the art of practical composition seem to have exceeded the Italians themselves. The reason of this may be, that in consequence of the precepts which Franchinus had delivered, the latter, under the direction of the Roman pontiffs, were employed in the forming of a new style for the church service. It had been discovered that the clergy, and indeed the laity, were grown tired of the uniformity of the Cantus Gregorianus, and were desirous of introducing

into the service a kind of music affording greater variety, and better calculated to engage the attention of the hearers. Leo X. who was so fond of music that the love of it is reckoned in the number of his failings, was the first pope that endeavoured at this reformation; and he had carried it so far, that the Council of Trent, in the year 1562, took the state of church-music into consideration, and, to prevent the farther abuse of it, made a decree against Curious singing,* which however had not its effect till about the close of that century, when Palestrina introduced into the church that noble and majestic style which has rendered him the admiration of all succeeding ages. After this the Italian masters fell in with the practice of the Flemings in the composition of madrigals and other forms of vocal harmony, in which a latitude was given to all the powers of invention, and in the exercise whereof it must be owned they discovered a wonderful degree of skill and judgment.

While these improvements were making abroad, it seems that in England also the science had made very considerable advances. It is true that from the time of John of Dunstable, who lived about the year 1450, to Taverner, who flourished almost a century after, the musical offices for the church discover very little of that skill and invention which recommend those works of the old Symphonetæ contained in the Dodecachordon of Glareanus; but whether it was owing to the affection which it is known Henry VIII. bore to music, or to that propensity in the people of this nation to encourage it, which made Erasmus say that the English challenge the prerogative of having the most handsome women, and of being 'most accomplished in the skill of music of any people;' it is certain that the beginning of the sixteenth century produced in England a race of musicians not inferior to the best in foreign countries; and to this truth Morley, in pag. 151 of his Introduction, speaking of Farnaby, Taverner, Shephard, Mundie, and others, has borne his testimony.

In the catalogue of Morley nothing like chronological order is observed, but in the following account of some of the persons mentioned, and of others omitted by him, the best arrangement is made of them that the scanty materials for that purpose would allow of. To begin with Cornish.

WILLIAM CORNISH lived about the year 1500; bishop Tanner has an article for him, wherein he mentions that some of his musical compositions are to be found in a manuscript collection in the possession of Mr. Ralph Thoresby, and mentioned by him in his History of Leeds, pag. 517. That manuscript has been searched, and it appearing that there were

* This decree, which was made for correcting abuses in the celebration of the mass, prohibits, among other things, 'l'uso delle musiche nelle chiese con mistura di canto, o suono lascivo, tutte le attioni secolari, colloqui profani, strepiti, gridori.' i.e. The use of music in churches mixed with lascivious songs, all secular actions, profane speeches, noises and screeches. Hist. del Concl. Trident. di Pietro Soave. Londra 1619, pag. 559.

Vincenzo Ruffo an eminent musician of the sixteenth century, and Maestro di Capella dal Duomo da Pistoria, composed and published at Venice in 1574, certain of the Psalms for five voices, and masses for six voices, with a note in the title of each, "that they were conformable to the decree of the Sacred Council of Trent;" and in the preface he relates, that his patron Cardinal Borromeo had willed him to observe the same as a rule in these several compositions.

two of the name, an elder and a younger, it is uncertain which of them was the author of the treatise between Trowthe and Enformacion, mentioned by Tanner to have been printed among the works of Skelton, and which has this title:—

In the Fleete made by me William Cornithe, otherwife called *Nybbwete*, chapelman with the most famous and noble king Henry the VII. his reyne the xix yere the moneth of July. A treatise betwene Trowth and Informacion;

But as the poem, for such it is, contains a parable abounding with allusions to music and musical instruments, and is in many respects a curiosity, that part of it is here inserted. It seems to be a complaint of Cornish himself against one that had falsely accused him, who is distinguished by the name of Informacion, as Cornish is by that of Musicke.

A parable between Informacion and Musike.

The examples.

Musike in his melody requireth true foundes,
Who setteth a song should geue him to armony;
Who kepeth true his tunes may not passe his fonde,
His alterations and prolacions must be pricked treuly,
For musike is trew though minifrels maketh mayfry,
The harper careth nothing but reward for his song,
Merily foundith his mouth when his tong goth all of wrong.

The Harpe.

A Harpe geueth founde as it is sette,
The harper may wrest it untunablye,
Yf he play wrong good tunes he doth lette,
Or by myftuning the very trew armonye;
A harpe well playde on shewyth fwete melody,
A harper with his wrest may tune the harpe wrong,
Myftuning of an instrument shal hurt a true fonge.

A Songe.

A fonge that is trewe and ful of fwetnes,
May be euyl fonge and tuncyd amyle,
The fonge of hymfelfe yet neuer the les
Is true and tunable, and fying it as it is:
Then blame not the fong, but marke wel this,
He that hath spit at another man's fonge,
Will do what he can to haue it fonge wronge.

A Claricorde.

The claricorde hath a tunely kynde,
As the wyre is wrested hye and lowe,
So it tuenyth to the players mynde,
For as it is wrested so must it nedes showe,
As by this refon ye may wel know,
Any instrument myftunyd shal hurt a trew fong,
Yet blame not the claricord the wreste doth wrong.

A Trompet.

A trompet blowen hye with to hard a blast,
Shal cause him to vary from the tunable kynde,
But he that bloweth to hard must fuge at the last,
And fayne to fall lower with a temperate wynde,
And then the trompet the true tune shall fynde,
For an instrument over wynded is tuned wrong,
Blame none but the blower, on him it is longe.

True Counsels.

Who plaieth on the harpe he should play trew,
Who fyingeth a fonge, let his voice be tunable,
Who wresteth the claricorde myftuningy efcchew,
Who bloweth a trompet let his wind be mesurable,
For instruments in them self be ferme and stable,
And of trowth, wold trowth to every manes fonge,
Tune them then truly for in them is no wronge.

Colours of Musyke.

In Musike I have learned iij colours, as this,
Blake, ful blake, uerte,* and in lykewise redde,
By these colours many subtil alterations ther is,
That wil begile one tho in cuning he be wel sped,
With a prike of Indicion from a body that is dede,
He shal try so his nombre with swetnes of his song,
That the ear shal be pleased, and yet he al wrong.

The Practiser.

I pore man, unable of this science to skyll,
Save litel practife I have by experience,
I mean but trouth and of good will,
To remembre the doers that useth such offence,
Not one sole, but generally in sentence,
By cause I can skyll of a little songe,
To try the true corde to be knownen from the wrong.

Treuth.

Yet trouth was not drownede ne sanke,
But still dyd flete aboue the water,
Informacion had played him such a pranke,
That with power the pore had lost his mater,
Bycause that trouthe began to clater,
Informacion hath taught hym to solfe his songe,
Paciens parforce, content you with wronge.

Trueth.

I assaye theis tunes me thought them not swete,
The concordes were nothyng musically,
I called Masters of Musike † cunying and discrete;
And the first prynciple, whose name was Tuballe,
Guido Boice, John de Murris, Vitryaco and them al,
I prayed them of helpe of this combrous songe,
Pricked with force and lettred with wronge.

True Answer.

They sayd I was horce I might not syngre,
My voice is to pore it is not awdyble,
Informacion is so curyous in his chauntynge,
That to bere the trew plainlong, it is not possible:
His proportions be so hard with so highe a quatrible,
And the playn song in the margyn so craftely bound,
That the true tunes of Tuball cannot have the right founde.

Trueth.

Well quod trueth, yet ones I trust verely,
To have my voyce and syngre agayne,
And to flete out trueth and clarify truly,
And ete suger candy adaye or twayne,
And then to the deske to syngre true and playn,
Informacion shal not alwaye entune hys song,
My parts shal be true when his countreurs shal be wrong.

Informacion.

Informacion hym enbolded of the monacorde,
From consonaunts to concordes he musyd his mayfry,
I assaye the musyke both knyght and lord,
But none would speke, the founde bord was to hye,
Then kept I the plain keyes the marred al my melody,
Enformacion drave a crotchet that past al my song
With proporcion parforce dreuen on to longe.

Dialogue.

Sufferance came in to syng a parte,
Go to, quod trouth, I pray you begyne,
Nay soft quod he, the gife of my parte
Is to rest a long rest or I set in,
Nay by long reftynge ye shal nothing wynne,
For informacion is so crafty and so hye in his songe,
That yf ye fal to resting in fayth it will be wrong.

* This passage should be red, blake ful, blake voide, &c. for the reason given pag. 223 of this work.

† It is worthy of remark that the succeeding musicians to Hobrecht, Okenheim, Iodocus Pratensis, and others of the Flemish school, had the appellation of Master, and hence the term Master of Music, which till lately was the designation of a practical musician. This denomination seems to have been first given them towards the middle of the sixteenth

Treweeth.

Informacion wil teche a doctour his game,
From superacut to the noble dyapason,
I assayd to acute, and when I came
Enformacion was mete for a noble dyatessaron,
He song by a Pothome ‡ that hath two kyndes in one,
With many subtil femetunes moft met for this long,
Pacience parforce, content you with wronge.

Trouth.

I kepe be rounde and he be square,
The one is bemole, and the other bequare,
If I myght make tryall as I could and dare,
I should show why these ij kynds do varye,
But God knowyth al, so doth not kyng Harry,
For yf he dydde than chaunge shold this iij song,
Pytye for patience, and conscience for wronge.
Neuyffwhete Parabolam.

The younger Cornish appears to have been a good musician. Two songs of his composition in the Thoresby manuscript above-mentioned, are inserted in the next succeeding book of this work.

JOHN TAVERNER, mentioned by Morley in his Catalogue, and also in his Introduction, pag. 151. and elsewhere, was organist of Boston in Lincolnshire, and of Cardinal, now Christ-Church college, in Oxford. It seems that he, together with John Frith the martyr, and sundry other persons, who left Cambridge with a view to preferment in this, which was Wolsey's new-founded college, held frequent conversations upon the abuses of religion which at that time had crept into the church; in short, they were Lutherans. And this being discovered, they were accused of heresy, and imprisoned in a deep cave under the college, used for the keeping of salt-fish, the stench whereof occasioned the death of some of them. John Fryer, one of these unfortunate persons, was committed prisoner to the master of the Savoy, where, as Wood says, 'he did much solace himself with playing on the lute, having good skill in music, for which reason a friend of his would needs commend him to the master; but the master answered, "take heed, for he that playeth is a devil, because he is departed from the Catholic Faith."' He was however set at liberty, became a physician, and died a natural death at London. § Frith had not so good fortune; he was convicted of heresy, and burnt in Smithfield, together with one Andrew Hewet, in 1533. ||

Taverner had not gone such lengths as Frith, Clerke, and some others of the fraternity; the suspicions against him were founded merely on his having hid some heretical books of the latter under the boards of the school where he taught, for which reason, and because of his eminence in his faculty, the cardinal excused him, saying he was but a musician, and so he escaped. ¶

century, for in the middle of it, when Giareanus wrote, they were termed Phonasi and Symphonete. Here they are called Masters of Music; and Guicciardini, in the passage lately cited from him, styles the musicians of Flanders 'Maestri della Musica.'

‡ I. e. APOHOME, the residue of three sesquioctave tones, after subtracting the diatessaron, consisting of two such tones, and the Pythagorean limma. See pag. 25 of this work.

§ Athen. Oxon. vol. II. pag. 124. Fasti, anno 1525.

¶ Fox's Acts and Monuments, vol. II. pag. 304, et seq.

¶ Fuller's Church History, Cent. XVI. Book V. pag. (171.) Fuller mistakes the Christian name of Taverner, calling him Richard.

O Splen - dor glo - ri - æ et . . I - ma - go Sub - stan - ti - æ De - i
 O Splen - dor glo - ri - æ et I - ma - go Sub - stan - ti - æ De - i Pa - tris
 Je - su Chris - te u - ni - ce e - jus - dem fi -
 Pa - tris omni - po - ten - ti - æ, Je - su Chris - te u - ni - ce e - jus - dem fi -
 . . omni - po - ten - ti - æ, Je - su Chris - te u - ni - ce e - jus - dem fi - li di -
 - li di - lec - te to - ti - us bo - ni fons vi - ve, Re - demp - tor mun - di
 - li di - lec - te to - ti - us bo - ni fons vi - - - ve, Re - demp - tor
 - - lec - te to - ti - - us bo - ni fons vi - - - ve, Re - demp - tor mun -
 ser - va - - tor et De - us nos - ter Sal - - - va -
 mun - - di ser - va - tor et De - us nos - ter Sal - - - va -
 - - di fer - va - - tor et De - us nos - ter Sal - - - va -

JOHN TAVERNER.

Dr. Ward, in his *Lives of the Gresham Professors*, has brought forward to view a man of the name of John Taverner, who it seems was chosen music professor in the year 1610; and it is necessary, in order to prevent confusion between these two persons, who had the same christian and surname, to distinguish the one from the other; and especially as Ward has said but very little of the former of them, and in speaking of him has made use of an expression that oftener implies contempt than respect, 'There was 'one John Taverner of Boston, &c.'

The truth is, that this person is he whom all men mean when they speak of Taverner the musician; and as to the professor, he was the son of the famous Richard Taverner,* who in the year 1539, published

* In the year 1532 this Richard Taverner, though a layman, there being then a scarcity of preachers, obtained of Edward VI. licence to preach in any part of his dominions, and preached before the king at court, wearing a velvet bonnet, a damask gown, and a gold chain; and in the reign of queen Elizabeth, being then high-sheriff of the county of Oxford, he appeared in the pulpit at St. Mary's, then of stone, with a sword and a gold chain about his neck, and made a sermon to the scholars, which had this hopeful beginning, 'Arriving at the mount of 'St. Mary's in the stoney stage, where I now stand, I have brought you 'some biscuits baked in the oven of charity, carefully conserved for the

a new edition of what is called Matthew's Bible, with corrections and alterations of his own; but it does not appear from the doctor's account of him that he had any better claim to the office of music professor than a testimonial from the university of Oxford, where he had studied, purporting that he was 'in his 'religion very sound, a due and diligent frequenter 'of prayers and sermons, and in his conversation 'very civil and honest,' with this general recommendation respecting his proficiency in music, 'that 'he had taken two degrees in that and other good 'arts.'

ROBERT FAIRFAX, of the Yorkshaire family of that name, was a doctor in music of Cambridge, and was incorporated of Oxford in the year 1511. Bishop Tanner says he was of Bayford in the county of

'chickens of the church, the sparrows of the spirit, and the sweet 'swallows of salvation.' The story is told by Wood, and repeated by Dr. Ward, in his *Lives of the Gresham Professors*, with an intimation that such flowers of wit and eloquence were then in vogue. But the state of literature was not even then so very low as to afford an excuse for such nonsense, or to induce the readers of it to believe that Mr. Sheriff Taverner could be any other than a very shallow and conceited old gentleman.

- vit, vi - - - vit De - o, quod e - nim vi - vit, vi - vit

De - o, vi - - - vit De - o. vi - - - vit De - - o.

- vit De - - o, quod e - nim vi - vit, vi - - vit De - o.

JOHN DIGON, PRIOR OF SAINT AUSTIN'S, CANTERBURY.

WILLIAM CHELLE was admitted at Oxford to the degree of bachelor in music 19th July, 1526. He was a secular chaplain, a prebendary, and precentor of Hereford cathedral. Bishop Tanner mentions two tracts of his writing, the one intitled *Musicæ Practicæ Compendium*, the other *De Proportionibus Musicis*.

JOHN GUINNETH was a native of Wales, of very poor parentage, but supported in his studies by some beneficent clergyman, who allowed him an exhibition. In the year 1531, being then a secular priest, and having spent twenty years in the study and practice of music, and composed the responses for the whole year in division-song, and many masses and antiphons for the use of the church, he supplicated for the degree of doctor, and obtained it upon payment of twenty-pence, and in 1533 was presented to the

rectory of St. Peter in West Chepe.* He wrote 'A Declaration of the State wherein Heretics do lead 'their Lives,' and other controversial tracts mentioned by Wood and Tanner.

JOHN SHEPARD studied at Oxford twenty years, and obtained a bachelor's degree. In 1554 he supplicated for that of doctor, but it does not appear by the registers that he obtained it. Some of his compositions are extant in a book intitled 'Mornyng and 'Evenyng prayer and Communion, set forthe in foure 'partes, to be song in churches, both for men and 'children, wyth dyvers other godly prayers and An- 'thems, of sundry mens doynge. Imprinted at London 'by John Day, dwelling over Alderf-gate, beneath 'Saint Martins, 1565; others in manuscript are among the archives in the music-school at Oxford.†

STEV'N first af - ter Christ for God's word his blood spent cru -

STEV'N first af - ter Christ for God's word his blood spent

STEV'N first af - ter Christ for God's word his blood spent

el - lie to death ston - ed by false A - - cuse - -

cru - - el - lie to death ston - ed by false A - cuse - -

cru - - el - lie to death ston - ed by false A - cuse - -

* Vide Athen. Oxon. vol. I. col. 102. Fasti, sub anno 1531.

† The music school at Oxford is the repository of a great number of books containing compositions of various kinds, many of them of great antiquity. That they are deposited in the music school rather than in the Bodleian or other libraries of the university, will be presently accounted for; but first it must be mentioned that one William Forrest, a priest in the reign of Henry VIII. well skilled in music and poetry, had made a copious collection of the best compositions then extant, and among them

many of John Taverner of Boston, Marbeck of Windsor, Dr. Fairfax, the above-named Shephard, and many others. These came to the hands of William Heather or Heyther, one of the gentlemen of the royal chapel, and who in 1623 was admitted to the degree of doctor in music. This person, who died in 1627, founded the music lecture at Oxford, and for the use of the professor, who was required to read it in the music school, made a donation of the above collection, together with his own additions thereto.

mente, Yeld - ing his soul to God, pray - ing him to . . . for - geve his
 mente, Yeld - ing his soul . . . to God, pray - ing him to fer - geve . . .
 mente, Yeld - ing his soul to God, pray - ing him to . . for-geve . . .

e - - ne - mies' ma - lice, blind ig - no - rance, and mis - be - - leve,
 his e - - ne - mies' ma - lice, blind ig - - no - rance, and mis - -
 his e - - ne - mies' ma - lice, blind ig - - no - rance, and mis - be - leve, . .

and mis - be - - - - - leve, not re - gard - ing his own
 - - be - - leve, not re - gard - ing his own gre - vious tor - ments
 not re - gard - - ing his own gre - vious tor - ments pre - -

gre vious torments pre - sent, but their punish - ment to come, . . which ne - ver should re - -
 pre - - sent, but . . their pu - nish - ment to come, which ne - - ver should re -
 - sent, but their pu - nish - ment to come, which ne - ver should re - lent;

- lent; and for his con - stant faith and fer - vent cha - ri - tie, From earth
 - lent; and for his con - stant faith and fer - vent cha - ri - tie, From
 and for his con - stant faith and fer - vent cha - ri - tie, From earth

saw in Heav'n . . Christ his glo - ri - ous Ma - jes - tie.
 earth saw in Heav'n Christ his glo - ri - ous Ma - jes - - - tie.
 saw in Heav'n Christ his glo - ri - ous Ma - jes - - - - tie.

JOHN SHEPARD.

CHAP. LXXVII.

JOHN REDFORD was organist and almoner of St. Paul's cathedral in the reign of Henry VIII., and, in virtue of the latter office, master of the boys there. Tusser, the author of the Five hundred Points of Husbandry, and his scholar, gives a character of him in the following stanza, taken from his life, written by himself in verse :—*

* * * * *

By friendship's lot to Paul's I got,
So found I grace a certain space
Still to remaine
With Redford there, the like no where.
For cunning fuch and vertue much,
By whom some part of mufic's art
So did I gaine.

JOHN TWORNE, a contemporary of Redford, and who has also a place in Morley's Catalogue, was of York, and most probably organist of that cathedral. The following motet may serve as a specimen of his abilities :—

STEL - LA coe - li ex-tir - pa - vit quae lac-ta-vit
STEL - LA coe - li ex-tir - pa - vit quae lac -
STEL - LA coe - li ex-tir - pa - vit, ex - tir - pa - vit quae lac-ta-vit

Do - mi-num, quae lac-ta-vit Do - mi-num, Mor - tis pestem quam plan - ta - vit, Mor -
- ta-vit Do-minum, quae lac-ta-vit Do - mi-num, Mor - tis pestem quam plan - ta - vit, Mor - tis
Do - minum, quae lac - ta-vit Do-minum, Mor - tis pestem quam planta - vit, Mor - tis pestem

- tis pestem quam planta - vit, primus Parens Ho - mi-num, primus Pa -
pes-tem quam planta - vit, primus Parens Ho - minum, primus Parens Ho -
quam plan-ta - vit, pri - mus Pa-rens Ho - minum, pri-mus Parens Ho -

- rens ho - mi-num, Ip - sa Stel - la nunc dig - ne - tur si-de-ra campes-ce - re,
- - - mi - num, Ip - sa Stel - la nunc dig - ne - tur si-de-ra campes-ce - re, si-de-
- - mi - num, Ip - sa Stel - la nunc dig - ne - tur, si-de-ra com - pes-ce - re, si-de-ra com -

side-ra campes-ce - re quo - rum bel-la plebem ce - dunt di-re mor-tis ul -
- ra campes-ce-re quo-run bel-la plebem ce - dunt di-re mor-tis ul-ce -
- pes-ce-re quo - rum bel - la plebem ce - dunt di-re mor-tis ul-ce -

* Tusser had related in the preceding stanzas of this poem, that in his infancy, probably when he was about seven years old, he was thrust out of his father's family, and sent to song-school at Wallingford college, where he underwent a great deal of hardship, being badly clothed, and as badly fed, and that while he was there he was impressed by virtue of a placard or warrant issued for the purpose of supplying the cathedrals of this kingdom with boys, and made to serve the choir in several places.

He adds, that at length he had the good fortune to get to St. Paul's, where he became the scholar of Redford, as in the stanza above-cited. Bishop Tanner says that afterwards, viz., anno 1543, he went to King's College Cambridge, which he might do when he was about twenty years of age. This circumstance ascertains pretty nearly the time when Redford lived, and fixes it to the latter end of the reign of Henry VIII.



- ce - re, di-re mor-tis ul-ce - re. O glo-ri-o-sa
 - re, di-re mor-tis ul-ce-re. O glo-ri-o-sa Stel-la
 - re, di-re mor-tis ul-ce - re. O glo-ri-o-sa Stel-



Stel-la ma-ris a pes-te suc-cur-re no - - - - - bis,
 ma - ris a pes-te succur-re no - - - - - bis, Au-di
 - la ma-ris a pes-te suc-cur-re no - - - - - bis, Au-di nos nam



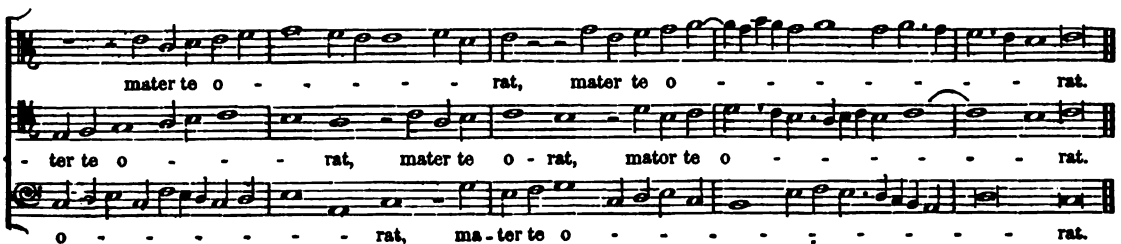
Au-di nos nam fi - - - - - li-us ni-hil ne-gans te ho-no -
 nos nam Fi - - - - - li-us ni-hil ne-gans te ho-no -
 Fi - - - - - li-us ni-hil ne-gans te ho-no-rat,



- rat, ni-hil ne-gans te ho-no-rat. Sal-ve nos Je - - - su.
 - rat, ni-hil ne-gans te ho-no-rat. Sal-ve nos Je - - su.
 ni-hil ne-gans te ho-no-rat. Sal-ve nos Je - - su.



Pro qui-bus vir-go, pro qui-bus vir - - - go, mater te o - - rat,
 Pro qui-bus vir-go, pro qui-bus vir - - - go, mater te o - - rat, ma -
 Pro qui-bus vir - - go, pro qui-bus vir - - go, mater te o - - rat, mater te



mater te o - - - rat, mater te o - - - rat.
 - ter te o - - rat, mater te o - rat, mator te o - - - rat.
 o - - - rat, ma-ter te o - - - ; rat.

JOHN THORNE, OF YORK.

GEORGE ETHERIDGE, in Latin Edrycus, born at Thame in Oxfordshire, was a scholar of Corpus Christi college in Oxford, anno 1534. He was admitted to a degree in physic, and, being excellently skilled in the Greek language, was appointed Regius professor thereof in that university about the year 1553; but having been in queen Mary's time a persecutor of the Protestants,* he was by her successor removed from that station, after which he betook himself to the practice of physic in the city of Oxford, by which, and the instruction of the sons of gentlemen of his own communion (for he strictly adhered to the Romish persuasion) in the rudiments of grammar, music, and logic, he acquired considerable wealth: one of his pupils was William Gifford, afterwards archbishop of Rheims. He was an excellent poet, and well skilled in the mathematics, as also in vocal and instrumental music, as appeared to Anthony Wood by some of his compositions, which it is probable he had seen, and the testimony of the more ancient writers. Leland, who was his familiar friend, thus celebrates his memory:

*Scripsisti juvenis multâ cum laude libellos,
Qui Regi eximie perplacuerunt meo.*

And Pits sums up his character in these words: 'Erat peritus mathematicus, musicus tum vocalis, tum instrumentalis, cum primis in Anglia confectus, testudine tamen et lyra præ cæteris delectatur. Poëta elegantissimus. Versus enim Anglicos, Latinos, Græcos, Hæbreos accuratissime componere, et ad tactus lyricos concinnare pertissime solebat.'

RICHARD EDWARDS, a native of Somersetshire, was a scholar of Corpus Christi college, Oxon, and received his musical education under George Etheridge above-mentioned. At the foundation of Christ Church college by Henry VIII. in 1547, he was made senior student, being then twenty-four years of age. At the beginning of queen Elizabeth's reign he was made a gentleman of the chapel and master of the children. He was an excellent musician, and also a poet. Puttenham, in his Art of English Poesie, pag. 5, together with the earl of Oxford, celebrates 'Maister Edwardes 'of her Majestys chapel,' for comedy and interlude. A particular account of him is referred to a subsequent part of this work, in which the old English poets are enumerated and characterised. In this place he is spoken of as a musician only, and in that faculty he is said to have manifested his skill in many very excellent compositions.

ROBERT TESTWOOD, of Windsor, and JOHN MARBECK of the same place, a man to whom church-music is greatly indebted, he being the original composer of the music to the cathedral service in use at this day, will be spoken of hereafter; at present it may suffice to say, that in the reign of Henry VIII. they were both condemned to the stake for heresy, that the former suffered, and the latter escaped the same fate in regard of his great merit in his profession.

Besides the several English musicians above enumerated, there were many of great eminence of whom

no memorials are now remaining, save those few of their compositions which escaped that general destruction of books and manuscripts which attended the dissolution of religious houses, and are now preserved in the libraries of cathedrals, those of the two universities, the colleges of Eton and Winchester, and the British Museum.† The following are the names of famous musicians who flourished before the Reformation, and have not a place in Morley's Catalogue printed at the end of his Introduction. John Charde, Richard Ede, Henry Parker, John Norman, Edmund Sheffield, William Newark, Sheryngham, Hamshere, Richard Davy, Edmund Turges, Sir Thomas Phelyppis, or Phillips, Browne, Gilbert Banister, and Heydingham.

Morley's Catalogue may be supposed to contain the names of the principal musicians of his time, and of the age preceding; but it is somewhat remarkable that he has neither in that, nor in any other part of his work, taken notice of our king HENRY VIII. as a composer of music. Erasmus relates that he composed offices for the church; bishop Burnet has vouched his authority for asserting the same; and there is an anthem of his for four voices, 'O Lord, 'the maker of all things,' in the books of the royal chapel, and in the collection of services and anthems lately published by Dr. Boyce, which every judge of music must allow to be excellent. It is true that in a collection of church-music, intitled 'The first book of 'selected Church Musick, collected by John Barnard, 'one of the minor canons of the cathedral church of 'St. Paul,' and published in the year 1641, this anthem is given to William Mundy, but the late Dr. Aldrich, after taking great pains to ascertain the author of it, pronounced it to be a genuine composition of Henry VIII.‡ The fact is, and there is additional evidence of it existing, not only that Henry understood music, but that he was deeply skilled in the art of practical composition; for in a collection of anthems, motets, and other church offices, in the hand-writing of one John Baldwin, of the choir of Windsor, a very good composer himself, which appears to have been completed in the year 1591, is the following composition for three voices, with these words, 'Henricus Octavus,' at the beginning, and these, 'Quod Rex Henricus Octavus,' at the end of the Cantus, or upper part:—

† Bale, who was a witness to it, gives the following relation of the havoc of books at that time, and the uses to which they were put:—

'A greute nombre of them whych purchased those superstycyouse 'manerons, reserved of those librayre bokes, some to serve theyr lokes, 'some to scoure theyr candlestykcs, and some to rubbe theyr bootcs. 'Some they sold to the grossers and sope-sellers, and some they sent 'over see to the bokebynders, not in small nombre, but at tymes whole 'shyppes full, to the wonderynge of the foren nacyoncs. Yea the 'universityes of this realme are not all clere in this detestable fact. 'But cursed is that belye whiche seeketh to be fedde with suche ungodly 'gaynes, and so depelye shameth hys natural contrye. I knowe a 'merchaunt man, whych shall at thys tyme be namelesse, that boughte 'the contentes of two noble lybraries for xl. shyllyngecs pryce, a shame 'it is to be spoken. Thys stuffe hath he occupied in the stede of graye 'paper by the space of more than these x. yeres, and yet he hath stowe 'ynough for as many yeres to come. A prodigyouse example is this, 'and to be abhorred of all men which love theyr nacyon as they shoulde 'do.' Preface To the laboryouse Journey & Serche of Johan Leylande for Englande's Antiquities, with declaracyons enlarged: by Johan Bale, anno 1549.

* He assisted at the degradation of Ridley previous to the execution of the sentence on him, and recommended that he should be gagged, to prevent his speaking against his persecutors. Fox's Acts and Monuments, edit. 1641, vol. III. pag. 500. Fox calls him 'one Edrige, the 'reader then of the Greek lecture.'

‡ See the preface to Divine Harmony, or A new Collection of select Anthems used at her Majesty's Chappels Royal, Westminster Abbey, St. Paul's, Windsor, both Universities, Eton, and most Cathedrals in her Majesty's Dominions, octavo, 1712, which book, through an anonymous publication, was compiled by Dr. William Croft, as is attested by an intimate friend of his, a reverend and worthy clergyman now living.

QUAM pul - chra es . . et quam de - co - ra, et quam de-co -

QUAM pul - chra es et quam de - co - ra, quam pulchra, es et quam de - co -

- ra, quam de - co - ra Quam pulchra es . . et quam de - co -

QUAM pul - chra es, Quam pulchra es et quam de-co - ra, et quam de-co -

- ra,

- ra, Cha - ris - si - ma, in de - li - cijs, Cha - ris - si - ma in de -

- ra,

Cha - ris - si - ma in de - li - cijs, Cha - ris - si - ma in de - li -

- li - cijs, in de - li - cijs, in de -

cijs, in de - li - cijs, Cha - ris - si - ma in de - li - cijs,

- li - cijs, de - li - cijs,

Sta - tu - ra tu - a as - si - mi - la - ta est Pal -

in de - li - cijs, Sta - tu - ra tu - a as - si - mi - la - ta

as - si - mi - la - ta est Pal -

ma, as - si - mi - la - ta, est Pal - ma, as -

est Pal - ma, as - si - mi - la - ta est Pal - ma, as - si - mi - la -



ma, et U - be - ra
 - si - mi - la - ta est Pal - ma, et U - be - ra - tu -
 - ta est Pal - ma, et U - be - ra



tu - a Bo - tris Ca -
 - a Bo - tris Ca -
 tu - a Bo - tris Ca -



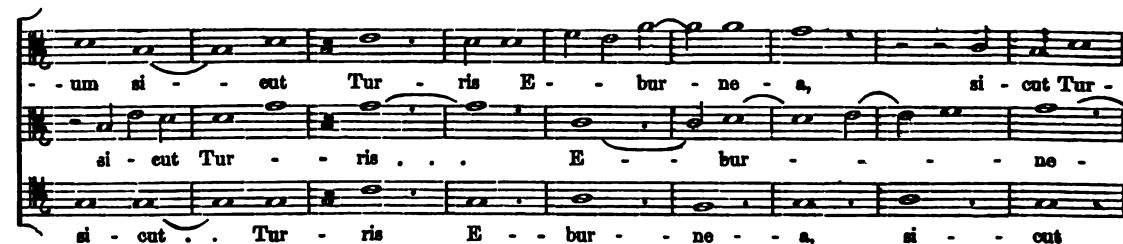
put tu - um ut Car - me - lus, Ca - put tu -
 - put tu - um ut Car - me -
 - put tu - um ut Car - me - lus,



- um ut Car -
 - lus, ut Car - me - lus, . .
 ut Car - me - lus, . .



me - lus, Col - lum tu -
 - ut Car - me - lus, Col - lum tu - um
 - ut Car - me - lus, Col - lum tu - um



- um si - cut Tur - ris E - bur - ne - a, si - cut Tur -
 si - cut Tur - ris E - bur - ne -
 si - cut . . Tur - ris E - bur - ne - a, si - cut

ris E - bur-ne - a, E - bur-ne - a, si - cut
a, Tur - ris
Tur - ris E - bur - ne - a, si - cut Tur - ris E -

Tur - ris . . . E - bur-ne - a. Ve - ni di - lec-te - mi, di -
E - bur - ne - a. . . Ve - ni di - lec - te -
bur-ne a, ve

- lec-te - mi, . . . ve - ni di - lec - te - mi, ve - ni di - lec -
- mi, ve - ni di - lec - te - mi, ve - ni di - lec
- ni . . . di - lec -

- te - mi. E - gre-di - a-mur, e - gre-di - a -
- te - mi. E - gre - di -
- te - mi. . .

- mur, e - gre - di - a-mur in A - grum,
- a - mur in A grum, E - gre - di - a - mur in
E - gre - di - a - mur in A . . .

in A . . .
A - grum, in A - grum,
grum, in A - grum,

. grum, vi - de - a - mus, vi - de - a -
 in A - grum, vi -
 in A - grum, vi - de - a - mus, vi - de - a - mus,
 mus si flo - res fruc - tus . . par - tu - ri - unt, si - .
 de - a - mus si flo - res fruc - tus, fruc -
 si flo - res fruc - tus par - tu - ri - unt, si flo - res fruc - tus par -
 flo - res fruc - tus par - tu -
 tus par - tu - ri - unt, fruc - tus par - tu - ri - unt,
 tu - ri - unt, si flo - res fruc - tus par - tu - ri -
 ri - unt, si flo - ru - e - runt, ma - la pu -
 si flo - ru - e - runt ma - la pu - ni - ca, ma - la pu -
 unt, si flo - ru - e - runt ma -
 ni - ca, si flo - ru - e - runt ma - la pu - ni - ca. I - bi da - bo ti - bi
 ni - ca. I - bi da - bo
 la pu - ni - ca. I - bi
 u - be - ra me - a, i - bi da - bo ti - bi u - be - ra me - a.
 ti - bi u - be - ra me - a, i - bi da - bo ti - bi u - be - ra me - a.
 da - bo ti - bi u - be - ra me - a, u - be - ra me - a.

HENRICUS OCTAVUS, ANGLIE REX.

And though such a degree of skill as is manifested in the above composition, may seem more than a king can well be supposed to have possessed, it is to be remembered, that being the younger of two brothers, and his chance of succeeding to the crown therefore precarious, he was intended by his father for the church, with a remote view to the archbishopric of Canterbury; music was therefore a necessary part of his education.* *And the statutes of Trinity College, Cambridge, founded by Henry VIII., make part of the examination of candidates for fellowships to be ' Quid in Cantando possint; ' indeed, all members were supposed capable of singing a part in choir service.*

As to the composition above given, the words are taken from the Canticum Canticorum, cap. vii. as rendered by the vulgate translation, and it may be presumed that the object of it was some female with whom the king was upon terms of great familiarity.†

It was doubtless owing to the affection which this prince entertained for music that his children also arrived at great proficiency in it. Edward VI. played on the lute, as appears from that expression in Cardan's account of him, 'Cheli pulsabat,' and indeed from his own Journal, where he mentions his playing on the lute to Monsieur le Mareschal St. André, the French ambassador. Mary also played on the lute and on the virginal, as appears by a letter of queen Catherine her mother, wherein she exhorts her 'to use her virginals and lute, if she has any:' and as to Elizabeth, her proficiency on the virginal is attested by Sir James Melvil, who himself had once an opportunity of hearing her divert herself at that instrument. This affection in the children of Henry VIII. for music is but a trivial circumstance in the history of their lives, but it went a great way in determining the fate of choral service at several periods during the Reformation, when it became a matter of debate whether to retain or reject it, as will appear by the following deduction of particulars.

The clamours against choral service, arising from the negligent manner of performing it, were about this time very great, and the council of Trent in their deliberations with a view to the correction of abuses in the celebration of the mass, had passed some resolutions touching church music that gave weight to the objections of its enemies: as the Reformation advanced these increased; those of the clergy who fell in with Wickliffe's notions of a reformation were for rejecting it as vain and unedifying; the thirty-two commissioners appointed by

* It has already been remarked that a competent skill in music was anciently necessary in the clerical profession: to the evidence of that fact formerly adduced may be added the following extract from a letter from Sir John Harrington to prince Henry, containing a character of Dr. John Still, bishop of Bath and Wells, in 1592. 'His breeding was 'from his childhood in good literature, and partly in musick, which was 'counted in those days a preparative to divinity; neither could any be 'admitted to *primam tonsuram*, except he could first *dene le bene con bene* 'own, as they called it, which is to read well, to conster well, and to sing 'well, in which last he hath good judgment.' Vide Sir John Harrington's Brief View of the Church, and Nugæ Antiquæ, 12mo. Lond. 1769, pag. 22.

† It was probably composed in his juvenile years, when it is known he had amour. One favourite of his he kept at Greenwich, her lodging was a tower in the park of the Old Palace; the king was used when he visited her to go from Westminster in his barge, attended by Sir Andrew Flamock, his standard-bearer, a man of humour, who entertained him with jests and merry stories. The king, as the signal of his approach, was used to blow his horn at his entrance into the park. Puttenham's Arte of English Poetrie, pag. 224.

the statutes of 35 Henry VIII. and 3 and 4 Edward VI. to compile a body of ecclesiastical laws, it is true, allowed of singing; but by the restraints that it is laid under in the *Reformatio Legum Ecclesiasticarum*, tit. *De Divinis Officiis*, cap. 5. it seems as if that assembly meant to banish figurate music out of the church, and by admitting only of that kind of singing in which all might join, to put cathedral and parochial service on a level.

In the reign of Mary no one presumed to vent his objections against choral singing: the Protestants were too much terrified by the persecutions to which their profession exposed them, to attend to the contents of the Romish ritual; and when they were once persuaded that the worship of that church was idolatrous, it could not but be with them a matter of indifference whether the offices used in it were sung or said.

But the truth of the matter is, that those men who were best able to expose the errors and superstition of popery withdrew themselves, and in a state of exile conceived a plan of reformation and church discipline so truly spiritual, as seemed to render useless the means which some think necessary to excite in the minds of men those ideas of reverence and respect which should accompany every act of devotion. Actuated by their zeal against popery, they in short declared those rites and ceremonies to be sinful, which at most could be but indifferent, as namely, the habits anciently worn by the minister in the celebration of divine service, and the little less ancient practice of antiphonal singing; and upon their arrival from Geneva and Francfort, at the accession of queen Elizabeth, the arguments against both were pushed with great vehemence in the course of the disciplinarian controversy.

This is a brief account of that opposition which threatened the banishment of the solemn choral service from our liturgy, and which, though made at different periods, was in every instance attended with the like ill success, as will appear from the following short review of the measures taken for its establishment and support.

For first, the disposition of Henry VIII. to retain the choral service may be inferred from the provisions in favour of minor canons, lay clerks, and choristers, not only in the refoundations by him of ancient cathedral and collegiate churches, but also in those modern erections of episcopal sees at Westminster, Oxford, Gloucester, Chester, Bristol, and Peterborough, which were made by him, and liberally endowed for the support and maintenance of singers in those cathedrals respectively.

Edward VI. manifested his affection for choral singing by his injunctions issued in the year 1547, wherein countenance is given to the singing of the litany, the priest being therein required to sing or plainly and distinctly to say the same. And in the first liturgy of the same king, the rubric allows of the singing of the 'Venite exultemus,' and other hymns, both at mattins and even-song, in a manner contradistinguished from that plain tune in which the lessons are thereby required to be read.

Farther, the statute of 2 and 3 Edward VI. for

uniformity of Service, contains a proviso that it shall be lawful to use Psalms or prayer taken out of the Bible, other than those directed by the new liturgy; which proviso let in the use of the metrical psalmody of the Calvinists, and also the anthem, so peculiar to cathedral service, and was recognized by the statute of 5 and 6 of Edward VI. made for confirming the second liturgy of the same king.

As to queen Elizabeth, she, by the forty-ninth of her injunctions, given in 1559, declares her sentiments of church music in terms that seem to point out a medium between the abuses of it, and the restraints under which it was intended to be laid by the *Reformatio Legum Ecclesiasticarum*. The statute of uni-

formity made in the first year of her reign, establishes the second liturgy of Edward VI. with a very few alterations. The act of the legislature thus co-operating with her royal will, as declared by her injunctions, and indeed with the general sense of the nation, choral service received a twofold sanction, and was thenceforth received among the rites and ceremonies of the church of England.

From all which transactions it may be inferred that the retention of the solemn choral service in our church was in a great measure owing to that zeal for it in the princes under whom the Reformation was begun and perfected, which may be naturally supposed to have resulted from their love of music.

BOOK IX. CHAP. LXXVIII

THE foregoing deduction of the history of music in England, and the specimens of vocal compositions above given, respect chiefly the church-service, and bring us nearly to that period when the Romish ritual ceased to prescribe the mode of divine worship, and choral service in this country assumed a new form. The general havoc and devastation, the dispersion of conventual libraries, and the destruction of books and manuscripts, which followed the dissolution of monasteries, and the little care taken to preserve that which it was foreseen would shortly become of no use, will account for the difficulty of recovering any compositions of singular excellence previous to the time of the Reformation; and that any at all remaining is owing to the zeal of those very few persons, who were prompted to collect them as evidences of the skill and ingenuity of our ancient church musicians.

From hence we may perceive that as far as concerns the music of the church, we are arrived at the commencement of a new era; and such in truth will it appear to be when we come to speak of the reformed liturgy, which though it was so calculated as to be susceptible of all those advantages that divine service is supposed to derive from music, can neither be said to be borrowed from that of the Romish church,* nor to resemble it so nearly as to offend any but such as deny the expediency, and even lawfulness of a liturgy in any form whatever.

These reasons render it necessary to postpone for a while the prosecution of the history of church-music in this our country, and to re-assume that of secular music; in the improvement whereof it is to be noted that we were at this time somewhat behind

our neighbours; for till about the commencement of the sixteenth century, it does not appear that any one of the English masters had attempted to emulate the Flemings or the Italians in the composition of madrigals; for which reason the account of the introduction of that species of music into this kingdom must also be referred to a subsequent page.

In the interim it is to be observed that songs and ballads, with easy tunes adapted to them, must at all times have been the entertainment, not only of the common people, but of the better sort: These must have been of various kinds, as namely, satirical, humorous, moral, and not a few of them of the amorous kind. Hardly any of these with the music to them are at this day to be met with, and those few that are yet extant are only to be found in odd part books, written without bars, and with ligatures, in a character so obsolete, that all hope of recovering them, or of rendering to any tolerable degree intelligible, any of the common popular tunes in use before the middle of the sixteenth century, must be given up. The two that follow have nevertheless been recovered by means of a manuscript formerly in the collection of Mr. Ralph Thoresby, and mentioned in the catalogue of his Museum, at the end of his History of Leeds; they both appear to have been set by William Cornish, of the chapel royal, in the reign of Henry VII. The words of the first song were written by Skelton, and there is a direct allusion to them in a poem of his entitled the *Crowne of Lawrell*, printed among his works. The latter song is supposed to be a satire on those drunken Flemings who came into England with the princess Anne of Cleve, upon her marriage with king Henry VIII.

PART I.

A - H be-shrew you by my fay, these wan-ton clarks be nyce al - way, A - vent, a -

A - H beshrew you by my fay, A - vent, a -

These wan - ton clarks be nyce al - way, A -

* That the book of Common Prayer hath its original from the mass-book is expressly denied by Hamon L'Estrange, in his *Alliance of Divine*

Offices, pag. 24; and the preface to queen Elizabeth's Liturgy refers to the ancient fathers for the original and ground thereof.

- vent, my Popin - jay, no - thyng but play, tul-ly
 - vent, my Popinjay, . . what will ye do nothyng but play, tul-ly val-ly
 - vort, a - vent, my Po-pin - jay, what will ye d - - o, tul-ly val-ly straw,

val-ly straw, let be I say, gup Jak of the vale, what ma-ner-ly
 straw, let be I say, gup chris-ti-an clewte, gup Jak of the vale, what ma-ner-ly
 gup christian clewte, . . what ma-ner-ly

Mar-ge-ry mylk and ale, what ma-ner-ly Mar-ge-ry, ma-ner-ly Mar-ge-ry mylk and ale.
 Mar-ge-ry, what ma-ner-ly Mar-ge-ry mylk and ale, what Mar-ge-ry mylk and ale.
 Mar-ge-ry mylk and ale, . . mylk and ale, what ma-ner-ly Mar-ge-ry mylk and ale.

PART II.
 By gode ye be a pre - ty pode, strawe Jamys so - der ye
 By gode ye be a pre - ty pode, and I loveyouan hole cart lode, ye
 And I love you an hole cart lode,

play the fode, I am no hack - nie for your rode, go watch a bole your back is brode.
 play the fode, I am no hacknie for your rode, go watch a bole your back is brode. Gup. *Repeat as before.*
 Gup

PART III.
 I wiss ye dele un - cur - tes - lie, what wolde ye frompil me, now fye, fye.
 I wiss ye dele un - cur - tes - lie, what wolde ye frompil me, now fye, fye. What and ye shall
 What and ye shall

by Christ ye shal not, I will not be ja - ped bo - de - ly.
 be my pigs-nye, my pigs-nye, no, no harde-ly, I will not be ja - ped bo - de - ly. Gup
 be my pigs-nye, my pigs-nye, my pigs - nye. Gup

PART IV.

Walke forthe your way, ye cost me noughte, now have I found that I have soughte, the best chepe
 Walke forthe your way, ye cost me noughte, now have I found that I have soughte, the best chepe

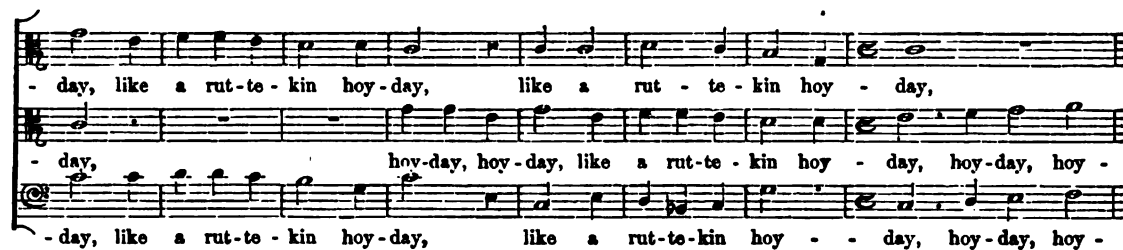
Yet for Hys love that all hath wrought, wed me or els I dye for
 flesh that e - ver I bought. yet for Hys love that all hath wrought, wed me or els I dye for
 flesh that e-ver I bought,

thought. Go ma-ner-ly Marge-ry mylke and ale.
 thought. Gup chris-ti-an clowte your broth is stale go man-er-ly Mar-ge-ry mylke and ale. Gup
 Gup chris-ti-an clowte your broth is stale,

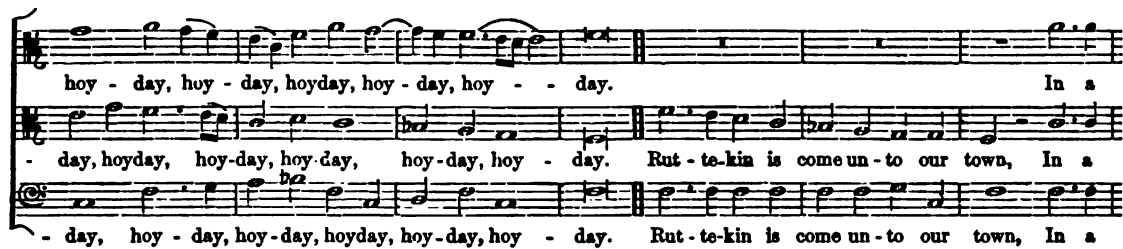
Gup
 WILLIAM CORNYSSHE, JUN.

HOYDAY, hoy - day jol-ly rutte - kin, hoy - day, hoy - day like a rut - te-kin, hoy-day.
 HOYDAY, hoyday jol-ly rutte-kin, hoy-day, hoyday like . a rut-te-kin hoy - day.
 HOYDAY, hoy - day jolly rutte-kin, hoy - day, hoy - day like a ru - te - kin hoy - day.

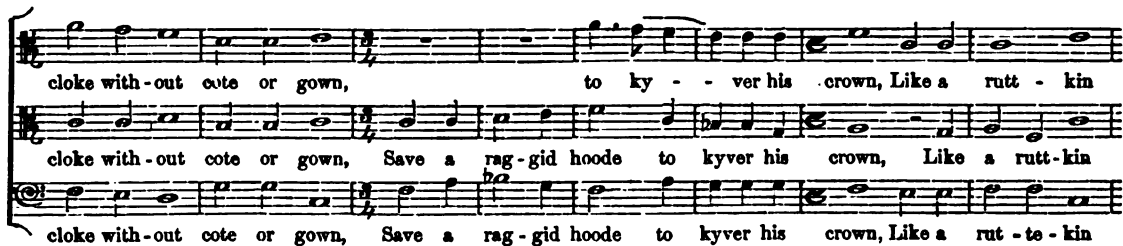
Hoy - day, hoy - day, hoy - day, . hoy-day hoy - day, hoy - day, hoy -
 Hoy - day, hoy - day, hoy - day, hoy - day, hoy - day, hoy -
 Hoy - day, hoy-day, hoy - day, hoy - day, hoy - day, hoy -



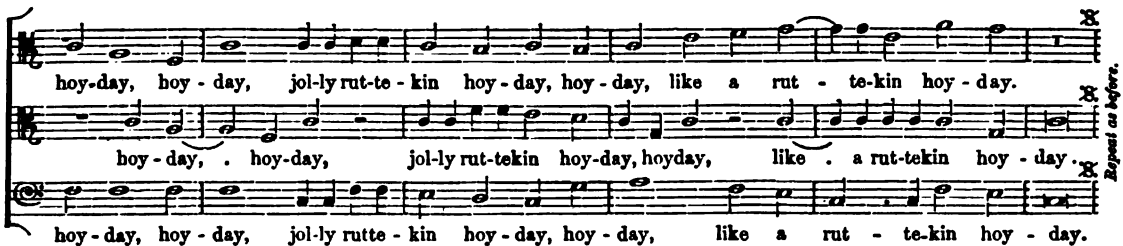
- day, like a rut-te-kin hoy-day, like a rut-te-kin hoy-day,
 - day, hoy-day, hoy-day, like a rut-te-kin hoy-day, hoy-day, hoy-
 - day, like a rut-te-kin hoy-day, like a rut-te-kin hoy-day, hoy-day, hoy-



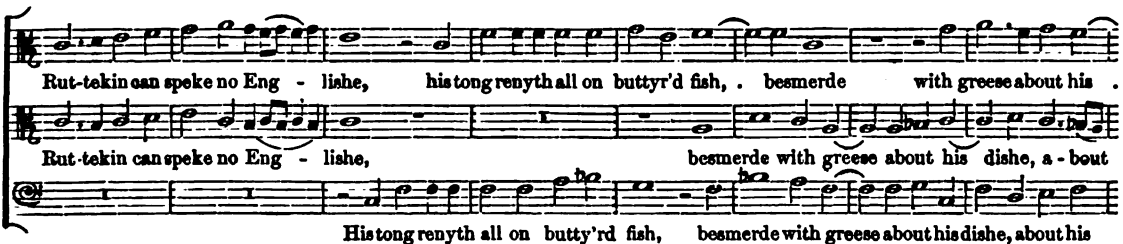
hoy-day, hoy-day, hoyday, hoy-day, hoy-day. In a
 - day, hoyday, hoy-day, hoy-day, hoy-day, hoy-day. Rut-te-kin is come un-to our town, In a
 - day, hoy-day, hoy-day, hoyday, hoy-day, hoy-day. Rut-te-kin is come un-to our town, In a



cloke with-out cote or gown, to ky-ver his crown, Like a rutt-kin
 cloke with-out cote or gown, Save a rag-gid hoode to kyver his crown, Like a rutt-kin
 cloke with-out cote or gown, Save a rag-gid hoode to kyver his crown, Like a rut-te-kin



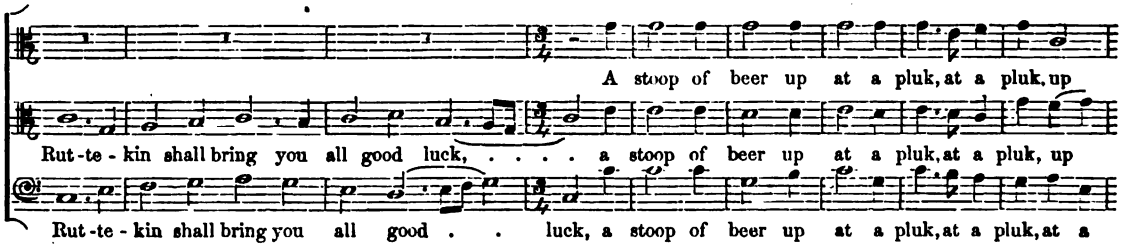
hoy-day, hoy-day, jol-ly rut-te-kin hoy-day, hoy-day, like a rut-te-kin hoy-day.
 hoy-day, hoy-day, jol-ly rut-tekin hoy-day, hoyday, like a rut-tekin hoy-day.
 hoy-day, hoy-day, jol-ly rutte-kin hoy-day, hoy-day, like a rut-te-kin hoy-day.



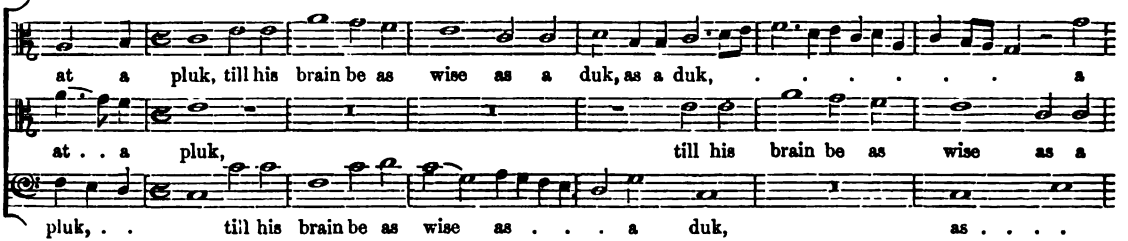
Rut-tekin can speke no Eng-lishe, histongrenyth all on buttyr'd fish, besmerde with greese about his
 Rut-tekin can speke no Eng-lishe, besmerde with greese about his dishe, a-bout
 Histongrenyth all on buttyr'd fish, besmerde with greese about his dishe, about his



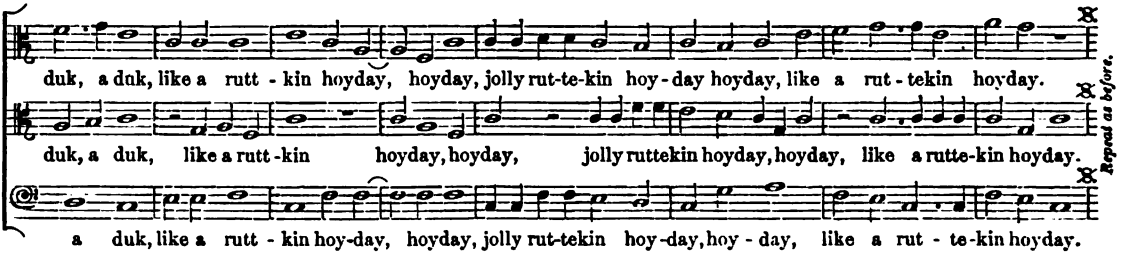
dishe, like a rutt-kin hoy-day, hoyday, jolly ruttekin hoy-day, hoyday, like a rut-te-kin hoyday.
 his dishe, like a rutt-kin hoyday, hoy-day, jolly ruttekin hoyday, hoyday, like a ruttekin hoyday.
 dishe, like a rutt-kin hoy-day, hoyday, jolly ruttekin hoy-day, hoy-day, like a rut-te-kin hoyday.



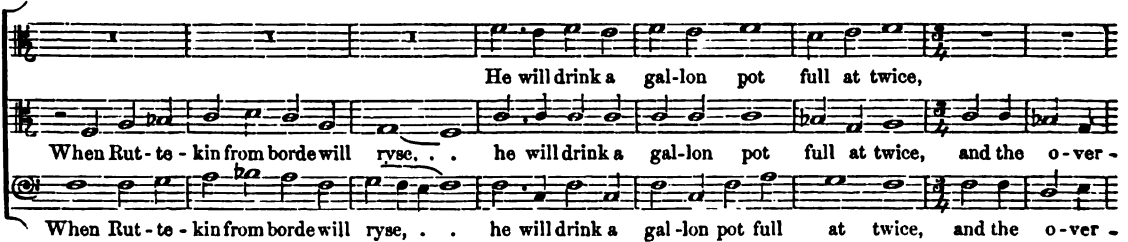
A stoop of beer up at a pluk, at a pluk, up
 Rut-te - kin shall bring you all good luck, . . . a stoop of beer up at a pluk, at a pluk, up
 Rut-te - kin shall bring you all good . . . luck, a stoop of beer up at a pluk, at a pluk, at a



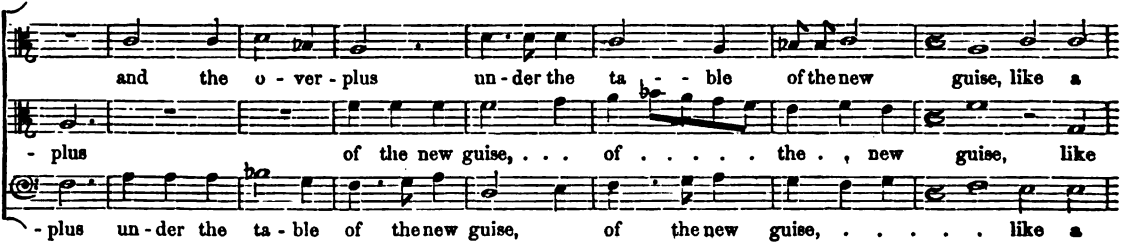
at a pluk, till his brain be as wise as a duk, as a duk, . . . a
 at . . . a pluk, till his brain be as wise as a
 pluk, . . . till his brain be as wise as . . . a duk, as . . .



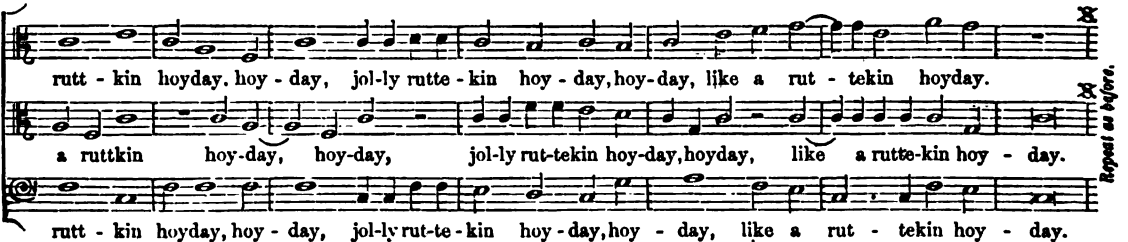
duk, a duk, like a rutt - kin hoyday, hoyday, jolly rut-te-kin hoy-day hoyday, like a rut - tekin hoyday.
 duk, a duk, like a rutt-kin hoyday, hoyday, jolly ruttekin hoyday, hoyday, like a rutte-kin hoyday.
 a duk, like a rutt - kin hoy-day, hoyday, jolly rut-tekin hoy-day, hoy - day, like a rut - te-kin hoyday.



He will drink a gal-lon pot full at twice,
 When Rut - te - kin from bordewill ryse, . . . he will drink a gal-lon pot full at twice, and the o-ver -
 When Rut - te - kin from bordewill ryse, . . . he will drink a gal-lon pot full at twice, and the o-ver -



and the o-ver-plus un-der the ta - - ble of the new guise, like a
 - plus of the new guise, . . . of . . . the . . . new guise, like
 - plus un-der the ta - ble of the new guise, of the new guise, . . . like a



rutt - kin hoyday, hoy - day, jol-ly rutte - kin hoy - day, hoy-day, like a rut - tekin hoyday.
 a ruttkin hoy-day, hoy-day, jol-ly rut-tekin hoy-day, hoyday, like a rutte-kin hoy - day.
 rutt - kin hoyday, hoy - day, jol-ly rut-te-kin hoy-day, hoy - day, like a rut - tekin hoy - day.

WILLIAM CORNYSH, JUN.

CHAP. LXXIX.

BETTER success has attended the attempts to recover the mere words of those songs and ballads which seem to have been the delight of past ages. By these which follow, we discover that with the young people of those times the passion of love operated in much the same manner as it does now; that our forefathers loved strong ale, and that the effects of it were discoverable in effusions of mirth and pleasantry, in a total oblivion of care, and a resolution to take no thought for the morrow.

If the coarseness of the raillery, or the profaneness, or indelicacy of expression observable in the two preceding, and in a few of the subsequent poems, should need an apology for inserting them, the best that can be made is, that they present to our view a true picture of the times.* Before the statute of James I. against profane cursing and swearing, the profanation of the name of God was so frequent in common discourse, that few looked on it as a crime. When Cox, bishop of Ely, hesitated about alienating a part of the episcopal estate in favour of Sir Christopher Hatton, queen Elizabeth disdained to expostulate with him, but swore by her Maker, in a letter yet extant under her own princely hand, to deprive him if he persisted in his refusal. In the earlier copies of our old English plays oaths make a part of the dialogue, and are printed at length: in the later editions these are expunged; an evidence that the national manners have in some respects improved in the course of a century.

As to the other objection, the indelicate style of love conversation, it may be imputed to the want of that refinement which the free and innocent intercourse of the sexes in the view of their elders and superiors necessarily induces, not to mention the improvements in literature, which furnish the means of regulating external demeanour, and teach us to distinguish the behaviour of a rustic from that of a gentleman.

In this respect, too, the manners of the present have greatly the advantage over those of past ages; at least the style of courtship, which is all that concerns the present question, is so much improved, that perhaps there are few gentlemen in this kingdom capable of writing to a mistress such letters as our king Henry VIII. in the ardour of his affection sent with presents of flesh, as he terms it, meaning thereby venison, to his beloved Anne Boleyn, a beautiful, modest, and well-bred young woman.

From the above particulars it may be inferred that the poetical compositions of the period here alluded to, wanted of that elegance which is now expected in every thing offered to the public view; and as a few of the following are destitute of such a recommendation, this circumstance would supply, were it necessary, the want of other evidence of their antiquity.

The simplicity is no less remarkable than the style,

* A discretion has been exercised in reprinting this edition by omitting some passages which appeared absolutely due to the progress of good manners since Sir John Hawkins' time. Some persons may think that this might have been even more extensively asserted.

of the following dialogue, which seems to be very ancient :—

I.

Beware my lyttyll fynger, Syr, I you desire,
Ye wrynge my hand to fore,
I pray you do no more,
Alas therefor,
Ye hurt my lyttyll fynger.

II.

Why so do you say ?
Ye be a wanton may,
I do but with you play,
Beware my lyttyll fynger.

III.

Syr, no more of such sport,
For I have lyttyll comfort
Of your hyther refort
To hurt my lyttyll fynger.

IV.

Forsoth goodly myfteris,
I am fory for your difcas :
Alack, what may you pleas ?
Beware my lyttyll fynger.

V.

Forsoth ye be to blame,
I wis it will not frame,
Yt is to your grete shame
To hurt my lyttyll fynger.

VI.

Thys was agayn my wyll certayn,
Yet wold I haue that hole agayn,
For I am fory for your payn,
Beware my lyttyll fynger.

VII.

Seeing for the cause ye be fory,
I wold be glad wyth you for to mary,
So that ye wold not ouer longe tarry
To hele my lyttyll fynger.

VIII.

I say wyth a joyfull hart agayne,
Of that I wold be full fayn,
And for your sake to take fume payne
To hele your lyttyll fynger.

IX.

Then we be both agreed
I pray you by our wedding wede,
And then ye shall haue lyttyll nede.
To hele my lyttyll fynger.

X.

That I will by God's grace,
I shall kyffe your minion face,
That yt shall thynne in euery place,
And hele your lyttyll fynger.

XI.

Beware my lyttyll fynger,
Alas my lyttyll fynger,
And oh my lyttyll fynger,
Ah lady mercy ! ye hurt my lyttyll fynger.

Behold the sentiments which sloth, corpulence, and rage have a tendency to inspire, in the following stanzas :—

I.

I cannot eat
But lyttyll meat,
My stomack ys not good ;
But sure I think
That I can drynke
With any that were a hode.
Though I go bare,
Take ye no care,
I am nothing a cold ;

I stuff my skyn
So full within
Of jolly good ale and old.
Back and fydes go bare,
Both fote and hand go cold,
But belly God fend thee good ale ynough,
Whether it be new or ould.

II.

I loue no roff,
But a nut-brown toffe.
And a crab laid in the fire,
A little bread
Shall do me stead,
Much bread I not desire;
No frost nor snow,
No winde I trow
Can hurte me if I wolde,
I am so wrapt,
And throwly lapt,
Of joly good ale and old.
Back and fydes go bare, &c.

III.

And Tib my wife,
That as het life,
Loueth well good ale to seek,
Full ofte drinks thee,
Till ye may see
The teares run down her cheeke;
Then doth she trowle
To me the bowle,*
Even as a mault-worm† shold;
And faith sweet heart
I took my part
Of this joly good ale and old,
Back and fydes go bare, &c.

IV.

Now let them drink,
Till they nod and wink,
Euen as good fellows shold do,
They shal not misse
To haue the blisse
Good ale doth bring men to:
And all poor soules,
That haue scowred boules.
Or haue them lustely trolde,
God saue the liues
Of them and their wiues,
Whether they be young or old.
Back and fydes go bare, &c.‡

In the following the praises of meek Mistress
Margaret are celebrated by her lover:—

I.

Margaret meke,
Whom I now like,
There is none like I dare well say;
So manerly,
So curtefly,
So prately
She delis away.

* TROWLE, or Trole the Bowl, was a common phrase in drinking, for passing the vessel about, as appears by the following beginning of an old catch:—

Trole trole the bowl to me,
And I will trole the same again to thee.

And in this other in Hilton's collection:—

Tom Bouls, Tom Bouls,
Seest thou not how merrily this good ale trowles?

† MAULT-WORM is a humorous appellation for a lover of ale or strong drink.

‡ This song is to be found in the old comedy of Gammer Gurton's Needle, which was first printed in 1551, and is even now well known in many parts of England.

II.

That goodly las,
When she me pas,
Alas I wote not where
I go or stond,
I thynk me bond,
In fe in lond
To comfort her.

III.

Her lusty chere,
Her eyes most clere,
I know no pere
In her beaute;
Both Cate and Bes,
Mawde and Anes,
Sys is witnes
Of her fetyneffe.

IV.

My Margaret
I cannot mette,
In feeld ne strete,
Wofull am I;
Leue loue this chance,
Your chere avance,
And let us dance
'Herk my Lady.‡

A lover sympathizes with his mistress, who is sick
and ill at ease, in these lines:—

I.

Jhone is fike and ill at ease,
I am full sory for Jhone's discase;
Alak good Jhone what may you please?
I shal beare the coft be swete sent Denys.

II.

She is so prety in euery degre,
Good lord who may a goodlyer be
In fawoure and in facion lo will ye se,
But it were an angell of the Trinite.
Alak good Jhone what may you please?
I shal beare the coft be swete sent Denys.

III.

Her countynauce with her lynyacion,
To hym that wolde of such recreation,
That God hath ordent in his first formation,
Myght wel be called conjuration.
Alak good Jhone what may you please?
I shal beare the coft be swete sent Denys.

IV.

She is my lytell prety one,
What shulde I say? my mynde is gone,
Yff she and I were togethir alone,
I wis she will not gyve me a bone,
Alas good Jhone shall all my mone
Be lost so sone? ¶

V.

I am a fole,
Leue this array,
Another day
We shall both play,
When we are sole.¶

The three following short poems exhibit a picture
of the deepest amorous distress:—

Have I not cause to mourn, alas!
Ever whiles that my lyfe do dure;
Lamenting thus my sorrowful case
In sighes deepe without recure?
Now remembryng my hard aduenture,
Meruellously makyng my hart wo:
Alas! her lokes haue perfed me so!

§ Probably the name of some dance-tune now forgotten.
¶ i.e. treat me with contempt.

¶ Together or by ourselves.

Sad is her chere with color chryftyne,
More fayrer of loke than fayer Elyn,
Eyes gray, clerer than columbyne,
Neuer a sweter of nature femynyne ;
Goodly in port, O what a paffyme and joy
Haue I when I behold her!

Wofully oppreffed wyth sorrow and payne,
Wyth fyghing my hart and body in diftrefe,
Greuoufly tormented through difdayne,
Luckyng the company of my lady and myftres,
Whych to atayne is yet remedyles ;
But God of his grace furely me fend
My forrowes importunate joyfully to amend.

Is it not fure a dedly payne,
To you I fay that louers be,
When faythful harts muft needs refrayn
The one the other for to fee ?
I you affure ye may trust me,
Of all the paynes that euer I knew,
It is a payne that moft I rewe.

The following trim stanzas exhibit the portrait of
a loyal lover:—

I.

As I lay fleepyng,
In dremes fletyng,
Euer my fwetyng
Is in my mynd ;
She is fo goodly,
With looks fo louely,
That no man truly
Such one can fynd

II.

Her bewty fo pure,
It doth under lure,
My pore hart full fure
In gouernance ;
Therfor now wyll I
Unto hyr apply,
And euer will cry
For remembrance.

III.

Her fayer eye perfyng,
My pore hart bledyng,
And I abydyng,
In hope of mede ;
But thus have I long
Entunyng this fonge,
Wyth paynes ful stronge,
And cannot fpede.

IV.

Alas wyll not she
Now fhew hyr pytye,
But thus wyll take me
In fuche dyfdayne ;
Methynketh I wys,
Unkynde that she is,
That byndeth me thus,
In fuch hard payne.

V.

Though she me bynde,
Yet fhall she not fynde
My pore hart unkynd,
Do what she can ;
For I wyll hyr pray,
Whiles I leue a day,
Me to take for aye,
For hyr owne man.

The following is the expostulation of a lover dis-
dained by his mistress, in a style of great simplicity :

I.

Complayn I may.
And right well fay,
Loue goth aftray,
And waxeth wilde ;
For many a day
Loue was my pray,
It wyll away,
I am begyld.

II.

I haue thankles
Spent my fcruyce,
And can purches
No grace at all ;
Wherefore doubtles,
Such a myftres,
Dame Piteles,
I may her call.

III.

For fikerly,
The more that I
On her do try
On me to thinke ;
The leffe mercy
In her fynd I,
Alas I dye,
My hart doth fynke.

IV.

Fortune pardye,
Afcineth me
Such cruelte,
Wythouten gylt ;
Owght not to be,
I twis pitee,
O fhame to fee,
A man fo fplitt.

V.

That I fhould fpyll
For my good wyll,
I thynke gret ill,
Agaynft all ryght ;
It is more ill,
She fhould me kyl.,
Whom I loue ftyll,
Wyth all my myght.

VI.

But to exprefse
My heauynes,
Syth my fcruyce
Is thus forfake ;
All comfortles,
Wyth much dyftres,
In wyldernes,
I me betake.

VII.

And thus adewe,
Deth doth enfewe.
Wythout refcure,
Her * * *
I trow a Jew
On me wold rew,
Knowing how trew
That I haue bene.

The two following are also of the amorous kin
and are of equal antiquity with the rest:—

I.

Ah my swete fwetyng ;
My lytyl pretty fwetyng,
My fwetyng wyl I loue whereuer I go ;
She is fo propre and pure,
Full ftedfast, ftabill and demure,
There is none fuch ye may be fure,
As my swete fwetyng.

II.

In all thys world as thynketh me,
Is none so pleſaunt to my eye,
That I am glad ſoo ofte to ſee,
As my ſwete ſwetyng.

III.

When I behold my ſwetyng ſwete,
Her face, her hands, her minion fete,
They ſeeme to me there is none ſo mete,
As my ſwete ſwetyng.

IV.

Above all other prayſe muſt I,
And loue my pretty pygmye
For none I fynd ſoo womanly
As my ſwete ſwetyng.

I.

What meanſt thou my fortune
From me ſo faſt to flye ;
Alas thou art importune
To worke thus cruelly.

II.

Thy waſte continually
Shall cauſe me call and crye ;
Woo worth the tyme that I
To loue dyd fyrſt apply.

The following is the dream of a lover, taken from
Mr. Thoresby's MS. :—

Benedicite ! whate dremyd I this night ?
Methought the worlde was turnyd up ſo down,
The ſon the moone had loſt ther force and lyght,
The ſee alſo drowned both toure and towne :
Yet more meruell how that I harde the ſounde
Of onys uoyce ſaying bere in thy mind,
Thi lady hath forgotten to be kynd.

CHAP LXXX.

THE two following ſhort poems appear by the
manuſcript from which they were taken to have
been compoſed about the time of Henry VIII.
They were communicated by a very judicious anti-
quary lately deceased, whoſe opinion of them was
that they were written either by, or in the perſon
of Anne Boleyn ; a conjecture which her unfortunate
history renders very probable :—

I.

Defiled is my name full ſore,
Through cruel ſpyte and falſe report,
That I may ſay for euermore
Farewell, my joy ! adewe, comfort !

II.

For wrongfully ye judge of me,
Unto my fame a mortall wounde :
Say what ye lyſt it wyll not be,
Ye ſeek for that cannot be found.

I.

O Death, rocke me on ſlepe,
Bringe me on quiet reſte,
Let paſſe my uerye guiltleſſe goſte,
Out of my carefull brest ;
Toll on the paſſinge bell,
Ring out the dolefull knell,
Let the ſounde my dethe tell,
For I muſt dye,
There is no remedye,
For now I dye.

II.

My paynes who can expreſe ?
Alas ; they are ſo ſtronge
My dolor will not ſuffer ſtrength
My lyfe for to prolonge ;
Toll on, &c.

III.

Alone in priſon ſtronge,
I wayle my deſtenye ;
Wo worth this cruel hap that I
Should taſte this miſerye.
Toll on, &c.

IV.

Farewell my pleaſures paſt,
Welcum my preſent payne,
I fele my torment ſo increſe,
That lyfe cannot remayne.
Ceafe now the paſſinge bell,
Rong is my dolefull knell,
For the ſound my deth doth tell,
Deth doth draw nye,
Sound my end dolefully,
For now I dye.

The following not inelegant ſtanzas ſeem to have
been occaſioned by the marriage of Margaret the
daughter of Henry VII. to James IV. king of
Scotland, in 1502 ; of whom it is related, that
having taken arms againſt his own father, he im-
poſed on himſelf the voluntary penance of con-
tinually wearing an iron chain about his waiaſt :—

I.

O fayer, fayreſt of euery fayne.
Princes moſte pleaſaunt and preclare.
The luſtiſt on lyue that bene,
Welcum of Scotland to be quene.

II.

Yong tender plant of pulchritude,
Defcendith of imperial blood,
Freſh fragrant flower of fayrehode ſhene,
Welcum of Scotland to be quene.

III.

Sweet luſty imp of bewtie clere,
Moſte mighty kings dowghter dere,
Borne of a princes moſt ſerene,
Welcum of Scotland to be quene.

IV.

Welcum the roſe both red and whyte,
Welcum the flower of our delyte.
Our ſpirit rejoicing from the ſplene,
Welcum of Scotland to be quene.

The two following ſongs are more ſententious
the firſt is a ſort of caveat againſt idle rumours :—

I.

Conſidering this world, and th' increſe of vyce,
Stricken into dump, right much I muſed,
That no manner of man be he neuer ſo wyſe,
From all ſorts thereof can be excuſed.

II.

And one vyce there is, the more it is uſed
Mo inconueniens ſhall grow day by day,
And that is this, let it be refuſed
Geue no ſure credens to euery hereſay.

III.

Lyght womens thoughts wyll runne at large,
Whether the tayle be falſe or juſt ;
Tydyngs of alehouſe or Graueſend barge,
Bere-baytings or barbers ſhopes is not to truſt.

IV.

An enemies taylor is sone distrust,
Ye shall perceue it parshall alway,
To all the foresayd refrayn we must,
To geue sure credens to every heresay.

V.

Though heresay be trewe, as perchance may fall,
Yet fyx not thy credens to high,
And though the teller seem right substantial,
And tell but heresay, why may he not lye?

VI.

Then betwixt lyght credens and a tonge hafty,
Surely the gyltles is cast away,
Condempyng the absent, that is unworthy
So passyth a lyfe from heresay to heresay.

VII.

Good Lord! how some wyll wyth a loud voyce,
Tell a tale after the best forte,
And some herers how they will rejoyce,
To here of theyr neybour ill report!

VIII.

As though it were a matter of comfort,
Herein our charite doth deokay,
And some maketh it but game and sport,
To tell a lye after the heresay.

IX.

Tell a good tale of God or some saynt,
Or of some mirakels lately done;
Some wyll beleue it hard and stent,
And take it after a full lyght facyon:

X.

We here say Christ suffrid passion,
And man shall reuert to earth and clay,
The rycheft or strongest know not how soone,
Beleue well now this, for true is that heresay.

This that follows is a dialogue between two lovers, in which there is great simplicity of style and sentiment, and a frankness discoverable on the lady's part not warranted by the manners of the present time:—

I.

[He] My harts lust and all my pleasure,
Is geuen where I may not take it agayne.
[She] Do you repent? [He] Nay I make you sure.
[She] What is the cause then you do complayne?

II.

[He] It pleyth my hart to shew part of my payne,
[She] To whom? [He] To you! [She] Plesse that wyl not me;
Be all thes words to me, they be in vayn,
Complayn where you may haue remedy.

III.

[He] I do complayn and find no releffe
[She] Yea do you so? I pray you tell me how.
[He] My lady lyft not my paynes to redresse.
[She] Say ye soth? [He] Yea, I make God a vowe.

IV.

[She] Who is your lady? [He] I put case you.
[She] Who I? nay be sure it is not so.
[He] In fayth ye be. [She] Why do you swere now?
[He] In good fayth I loue you and no mo.

V.

[She] No mo but me? [He] No so say I.
[She] May I you trust? [He] Yea I make you sure.
[She] I fere nay. [He] Yea, I shall tell you why.
[She] Tell on, lets here. [He] Ye haue my hart in cure.

VI.

[She] Your hart? nay. [He] Yea without mesure,
I do you loue. [She] I pray you say not so.
[He] In fayth I do. [She] May I of you be sure?
[He] Yea in good fayth. [She] Then am I yours also.

By what kind of sophistry a lover may reason himself into a state of absolute indifference, the following ballad teaches:—

I.

Yf reason did rule.
And witt kept scoole,
Discrecion shoulde take place,
And heaue out heauines,
Which banished quietnes
And made hym hide his face.

II.

Sith time hath tried,
And truth hath spied,
That fained faith is flatterie,
Why should disdaine
Thus ouer me raigne,
And hold me in captiuitie?

III.

Why shoulde cause my harte to braffe,
By fauoring foolishhe fantazie?
Why shoulde dispare me all to teare,
Why shoulde I joyne with jelousie?

IV.

Why should I trust,
That neuer was iuste,
Or loue her that loues manye;
Or to lament
Time past and spente,
Whereof is no recoverie?

V.

For if that I
Should thus applye.
Myselfe in all I can;
Truth to take place,
Where neuer truth was,
I weare a foolishhe man.

VI.

Sett forth is by science,
Declare it doth experience,
By the frute to know the tree;
Then if a faininge flatterer,
To gaine a faithful louer,
It may in no wise be.

VII.

Therefore farewell flatterie,
Fained faith and jelousie,
Truth my tale shall tell;
Reason now shall rule,
Witt shall kepe the scoole,
And bed you all farewell.

The arguments in favour of celibacy contained in the following song are neither new or very cogent; yet they are not destitute of humour:—

I.

The bachelor most joyfullye,
In pleasant plight doth passe his daies,
Good fellowshipp and companie
He doth maintaine and kepe alwaie.

II.

With damfells braue he maye well goe,
The married man cannot doe so,
If he be merie and toy with any,
His wife will frowne, and words geue manye;
Her yellow hofe she strait will put on,
So that the married man dare not displease his wife Joane.

There is somewhat subtle in the argument used by the author of the following stanzas against lending

money, which in short is this, to preserve friendship, resist the emotions of it :—

I.

I had both monie and a frende,
Of neither though no store ;
lent my monie to my frende,
And tooke his bonde therfore.

II.

I asked my monie of my frende,
But nawght save words I gott ;
I lost my monie to kepe my frende,
For fewe hym would I not.

III.

But then if monie come,
And frende againe weare founde,
I woulde lend no monie to my frende,
Upon no kynde of bonde.

IV.

But after this for monie cometh
A friend with pawne to paye,
But when the monie should be had,
My frende used such delay,

V.

That neede of monie did me force,
My frende his pawne to sell,
And so I got my monie, but
My frende cleue from me fell.

VI.

Sith bonde for monie lent my frende,
Nor pawne assurance is,
But that my monie or my frende
Therbye I ever miife.

VII.

If God send monie and a frende,
As I haue had before.
I will keepe my monie and save my frende.
And playe the foole no more.

The examples above given are only of such songs and ballads as it is supposed were the entertainment of the common people about the year 1550, they are therefore not to be considered as evidences of the general state of poetry at that time, nor indeed at any given period of the preceding century ; for, not to mention Chaucer, who flourished somewhat before, and whose excellencies are known to every judge of English literature, the verses of Gower abound with beautiful images, and excellent moral precepts ; and those of the earl of Surrey, Sir Thomas Wyatt, and a few others, their contemporaries, with the liveliest descriptions, and most elegant sentiments. One of the most excellent poems of the kind in the English language is the ballad of the Nut-brown Maid, published with a fine paraphrase by Prior, which, though the antiquity of it has by a few been questioned, was printed by Pinson, who lived about the year 1500, and probably was written some years before.

Many of the songs or popular ballads of this time appear to have been written by Skelton, and a few of them have been occasionally inserted in the course of this work ; as to his poems now extant, they are so peculiarly his own, so replete with scurrility, and, though abounding with humour, so coarse and indelicate, that they are not to be matched with any others of that time, and consequently reflect no disgrace on the age in which they were written.

Nothing can be more comical, nor nothing more uncleanly, if we except certain verses of Swift, than

that poem of Skelton entitled the Tunnyng of Elynour Rummyng. This woman is said by him to have lived at Letherhead in Surrey, and to have sold ale, the brewing or tunning whereof is the subject of the poem. The humour of this ludicrous narrative consists in an enumeration of many sluttish circumstances that attended the brewing, and a description of several persons of both sexes, of various characters, as travellers, tinkers, servant-wenchs, farmers' wives, and many others, whom the desire of Elynour's filthy beverage had drawn from different parts of the country ; of her ale they are so eager to drink, that many for want of money bring their household furniture, skillets, pots, meal, salt, garments, working-tools, wheel-barrows, spinning-wheels, and a hundred other things. This numerous resort produces drunkenness and a quarrel, and thus ends Skelton's poem the Tunnyng of Elynour Rummyng.

Of his talent for satire the same author has given an example in the following verses, which because they are characteristic of an ignorant singing-man, a contemporary of his, are here inserted at length :—

Skelton Laureate against a comely Coyfthrowne, that curiously chaundyng and carryshly cowntred and madly in his Musikes mokkyshly made, agaynst the ix Musis of politike Poems and Poettys matriculat.

Of all nacyons under the Heuyn,
These frantike foolys I hate most of all,
For though they fumble in the synnes feyn,
In peuyfnes yet they snapper and fall,
Which men the vii deadly sins call,
This peuyth proud this prender geft,
When he is well yet can he not rest.

A swete fuger lofe and fowre bayards bun
Be sumdele lyke in forme and shap,
The one for a duke the other for a dun ;
A maunchet for Morell thereon to snap,
His hart is to hy to haue any hap,
But for in his gamut carp that he can,
Lo Jak wold be a Jentyman.

With hey troyly loly, lo whip here Jak,
Alumbek fodyldym syllyorym ben,
Curiously he can both counter and knak,
Of Martin Swart, and all hys mery men,
Lord how Perkyn is proud of his Pohen,
But ask wher he syndyth among his monachorde
An holy-water-clark a ruler of lodes.

He cannot fynd it in rule nor in space,
He folsyth to haute, hys trybyll is to hy,
He braggyth of his byrth that borne was full bace,
Hys musyk withoute mesure, to sharp is his my,*
He trymmyth in his tenor to counter pardy,
His discant is bely, it is without a mene,
To fat is his fanty, his wyt is to lene.

He tumbryth on a lewde lewte, Roty bulle Joyse,†
Rumbill downe, tumbil downe, hey-go now now,
He fumblyth in his fyngering an ugly rude noife,
It seemyth the fobbyng of an old fow :
He wolde be made moch of and he wyft how ;
Wele sped in spyndels and tynung of travellys,
A bungler, a brawler, a pyker of quarellys.

Comely he clappyth a payre of clauycordys,
He whytelyth so swetely he maketh me to swet,
His discant is dashed full of discordes,
A red angry man but easy to intrete ;
An uher of the hall fayn wold I get,
To pointe this proude page a place and a rome,
For Jak wold be a Jentilman that late was a gromme.

* i. e. The syllable *my* used in solmisation.

† The initial words of some old song.

Jak wold Jet and yet Jill fayd nay,
 He counteth in his countenance to check with the best,
 A malaperte medler that pryeth for his pray,
 In a dyth dare he rush to wrangill and to wrefte,
 He findeth a proporcyon in his prycke songe,
 To drynke at a draught a large and a long.

Nay jape not with him, he is no small fole,
 It is a solempe fyre and a folayne,
 For lordes and ladyes lerne at his scole,
 He techyth them so wyfely to folf and to fayne.
 That neither they fing wel prike-song nor plain,
 This Doctore Dellias commensyd in a cart,
 A maister, a mynstrel, a fydlar, a —.

What though ye can counter *Custodi nos*,
 As wel it becomith you a paryth towne clarke
 To fing *Supinitati dedit Agros*,
 Yet bere ye not to bold, to braule ne to bark,
 At me that medeled nothing with youre wark,
 Correct first thy felfe, walk and be nought,
 Deme what you list thou knowist not my thought.

A prouerbe of old fay well or be still,
 Ye are to unhappy occasion to fynde,
 Uppon me to clater or else to fay yll.
 Now have I shewyd you part of your proud mind,
 Take this in worth the best is behind.
 Wryten at Croydon by Crowland in the clay,
 On Candelmas euyng the Kalendas of May.

Mention has already been made of the service-books anciently used in the churches and chapels of this kingdom, by whom they were generally made, and of the enormous price they bore while copies of them could only be multiplied by writing. This, though a great inconvenience, was not the only one which music laboured under, for the characters used in musical notation were for a series of years fluctuating, so that they assumed a new form in every century, and can hardly be said to have arrived at any degree of stability till some years after the invention of printing; and it will surprise the reader to behold, as he may in the specimens of notation given (see Appendix, Nos. 45 to 55), the multifold variation of the musical characters between the eleventh century, when they were invented by Guido, and the fifteenth, when, with a few exceptions in the practice of the German printers, they were finally settled.

Upon these specimens it is to be remarked, that they exhibit a series of characters used for the purpose of musical notation from the eleventh century down to the fourteenth, as they are to be found in missals, graduals, antiphonaries, and other books of offices adapted to the Romish service. With regard to No. 48, 'Paupertate Spiritus,' the musical characters appear to be such as are said to have been in use previous to the invention of the stave by Guido, and from the smallness of the intervals it may be questioned whether the notes are intended to signify any thing more than certain inflections of the voice, so nearly approaching to monotony, that the utterance of them may rather be called reading than singing.

The example (No. 50) 'Eripe me Domine' is clearly in another method of notation, for the stave of Guido, and also the F cliff, are made use of in it. With regard to the characters on the lines and spaces, they are very different from those points, from the use

whereof in musical composition the term *Contrapunctus* took its rise; and so little do they resemble the characters proper to the *Cantus Mensurabilis*, as described by Franco, De Handlo, and other writers on that subject, that it is not without great difficulty that they can be rendered intelligible. The author from whom this example is taken exhibits it as a specimen of the manner of notation in the twelfth century; it nevertheless appears to have continued in practice so low down as the sixteenth, for all the examples in the *Margarita Philosophica* of Gregory Reisch, printed in 1517, are in this character, as are also those in the *Enchiridion* of George Rhaw, the *Compendium Musices* of Lampadius, and other works of the like kind, published about the same time.

The specimen (No. 52) 'Verbum Patris' is of the thirteenth century, and as to the form of the characters, differs in some respects from the former; and here it may be remarked, that the F and C cliffs have each a place in the stave, and that the station of the former is marked by a pricked line. Other distinctions for the places of the cliffs, namely, by giving the lines a different colour or different degrees of thickness, were usual in the earlier times, and are taken notice of in an earlier part of this work.

The character in the specimen (No. 54) 'Vere dignum et justum' are supposed to denote the inflections of the voice in reading.

The plate No. 45 shews the different forms of the cliffs, and their gradual deviation from their respective roots at different periods.

The two next succeeding plates contain a comprehensive view of the musical notes in different ages, with their equivalents in modern characters.

The specimens are taken from the *Lexicon Diplomaticum* of Johannes Ludolphus Walther, published at Ulm in 1756; they appear to have been extracted from ancient service-books in manuscript, of which there are very many yet remaining in the public libraries of universities and other repositories in Europe.* The explanations in modern characters are the result of his own labour and learned industry, and furnish the means of rendering into modern characters those barbarous marks and signatures used by the monks in the notation of their music.

CHAP. LXXXI.

THE invention of printing proved an effectual remedy for all the evils arising from the instability of musical notation, for besides that it eased the public in the article of expence, it introduced such a steady and regular practice as rendered the musical, an universal character.

The first essays towards music-printing were those examples which occur in the works of Franchinus, printed at Milan; but of these it may be observed, that the notes therein contained are not printed from letter-press types, with a character cut on each, but

* One of the finest of the kind, perhaps in the world, is the *Liber Regalis*, containing, among other things, the religious ceremonial of the coronation of Richard II. and his queen, with the musical notes to the offices. This curious MS. was originally intended for the use of the high-altar in Westminster abbey, and is now in the library of that church.

in masses, or from blocks, with a variety of characters engraven thereon. The Germans improved upon this practice, and the art of printing music with letter-press types appears to have arrived at great perfection among them by the year 1500.

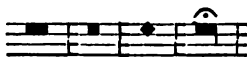
Mattheson, in his *Volkomenen Capelmeister*, pag. 58, relates that Jaques De Sanleques, a man who had arrived to play exquisitely on all instruments, without the least instruction, was the first who taught the art of making music-types, and the method of printing from them, in France; and that he died in the year 1660, at the age of forty-six, having precipitated his death by excessive study and application. This account of the introduction of musical printing types into France can never be true; for the Psalms and other works of Claude Le Jeune, which was published at Paris by Pierre Ballard before Sanleques was born, that is to say in 1603 and 1606, are a demonstration to the contrary; and, to judge from the exquisite beauty and elegance of the characters, and the many elegant ornaments and ingenious devices for the initial letters, it seems that the French had in this kind of printing greatly the advantage of their neighbours.

In England the progress of this art was comparatively slow, for in the *Polychronicon** of Ranulph Higden, translated by Trevisa, and printed by Wynken de Worde, at Westminster in 1495, are the following musical characters, which Mr. Ames with good reason supposes to be the first of the kind printed in England:—



Grafton improved upon these characters in the book published by him in 1550, entitled, *The Book of Common Prayer noted*, which was composed by John Marbeck organist of Windsor, and contains the rudiments of our present cathedral service; these, in the opinion of the printer, stood so much in need of explanation, that he has inserted the following memorandum concerning them:—

‘In this booke is conteyned so much of the order of
‘Common Prayer as is to be sung in churches, wherein
‘are used only these iiii fortes of notes:—



‘The first note is a strenge note, and is a breve; the
‘second is a square note, and is a femybreve; the iii a
‘pycke, and is a mynymme. And when there is a
‘prycke by the square note, that prycke is halfe as

* Those who do not know that the *Polychronicon* is a multifarious history of events without order or connexion, will wonder how these characters could find a place in it, but it is thus accounted for; the author relates the discovery of the consonances by Pythagoras, and to illustrate his narration gives a type of them in the form above described.

‘muche as the note that goeth before it. The iiii is
‘a clofe, and is only used at the end of a verbe.’

These characters were considerably improved by the industrious John Day, who in 1560 published the church-service in four and three parts, to be sung at the morning, communion, and evening prayer, and in 1562 the whole book of Psalms, collected into English metre by Sternhold, Hopkins, and others, with apt notes to sing them withal, and by Thomas Vautrollier, who in 1575 published the *Cantiones* of Tallis and Bird under a patent of queen Elizabeth to the authors, the first of the kind.† The succeeding music-printers to Vautrollier and Day were Thomas Este, who for some reasons not now to be guessed at, changed his name to Snodham,‡ John Windet, William Barley, and others, who were the assignees of Bird and Morley, under the patents respectively granted to them for the sole printing of music. These men followed the practice of the foreign printers, but made no improvement at all in the art, nor was any made till the time of John Playford, who lived in the reign of Charles II.

In what manner, and from what motives, music was first introduced into the church-service, has already been mentioned; and in the account given of that matter it has been shewn that the practice of antiphonal singing took its rise in the churches of the East, namely, those of Antioch, Cesaræa, and Constantinople; that the Greek fathers, St. Basil and St. Chrysostom, were the original institutors of choral service in their respective churches; that St. Ambrose introduced it into his church at Milan; that from thence it passed to Rome, from whence it was propagated and established in France, Germany, Britain, and, in short, throughout the West: and, to speak more particularly, that Damasus ordained the alternate singing of the Psalms, together with the Gloria Patri, and Alleluja; in 384, Siricius, the anthem; in 507, Symmachus, the Gloria in Excelsis; that in 590 Gregory the Great reformed the *Cantus Ambrosianus*, and established that known by his name; and that about the year 660 Vitalianus completed the institution by joining to the melody of the voice the harmony of the organ.

From this deduction of the rise and progress of music in cathedral worship, it may seem that the introduction of music into the church was attended with little difficulty. But the case was far otherwise; fortunately for the science, the above-mentioned fathers were skilled in it, and their zeal co-operating with their authority, enabled them to procure it admittance into the church; but there were then, as there have been at all times, men, who either having no ear, were insensible to the effects of harmony, or who conceiving that all such adventitious aids to devotion were at least unnecessary, if not sinful, laboured with all their might to procure the exclusion of music of every kind from the church, and to restore the service to that original plainness and simplicity, which they conceived to be its perfection.

And first St. Austin, whose suffrage is even at this day cited in favour of choral music; although

† Ames's *Typographical Antiquities*, pag. 335.

‡ Ibid.

speaking of the introduction of antiphonal singing into the church of Milan, at which he was present, thus pathetically expresses himself: 'How abundantly did I weep before God to hear those hymns of thine; being touched to the quick by the voices of thy sweet church song! The voices flowed into my ears, and thy truth pleasingly distilled into my heart, which caused the affections of my devotion to overflow, and my tears to run over, and happy did I find myself therein.'

Yet this very St. Austin having reason to suspect that he had mistaken the natural workings of his passions for the fervent operations of a vigorous devotion, censures himself severely for being so moved with sensual delight in divine worship, and heartily blesses God for being delivered from that snare. He withal declares that he often wished that the melodious singing of David's Psalter with so much art were moved from his and the church's ears; and that he thought the method which he had often heard was observed by Athanasius, bishop of Alexandria, was the safest, who caused him that read the Psalm to use so little variation of the voice, that he seemed rather to pronounce than sing.* And elsewhere he declares that the same manner of singing as was used in Alexandria prevailed throughout all Africa.†

St. Jerome, though a friend to magnificence in divine worship, seems to more than hint a dislike of artificial singing in the church, when he says, 'That we are not like tragedians to gargle the throat with sweet modulation, that our theatrical tunes and songs may be heard in the church, but we are to sing with reverence.'‡

Isidore of Sevil, though a writer on music, and as such mentioned in the account herein before given of writers on the science, says, that the singing of the primitive Christians was attended with so small a variation of the voice, that it differed very little from reading; and as for that pompous manner of singing, which a little before his time had been introduced into the Western church, he says it was brought in for the sake of those who were carnal, and not on their account who were spiritual, that those who were not affected by words might be charmed by the sweetness of the harmony.§

Rabanus Maurus, another musical writer, and a disciple of the famous Alcuin, freely declares himself against the use of musical artifice and theatrical singing in the worship of God, and is only for such music as may move compunction, and be clearly understood by the hearers.||

Thomas Aquinas, universally reputed the ablest and most judicious of the schoolmen, declares against the use of instruments in divine worship, which, together with the pompous service of the choir, he intimates are Judaical. He says that 'musical instruments do more stir up the mind to delight, than frame it to a religious disposition.' He indeed allows that 'under the law such sensitive aids might be needful, as they were types or figures of some-

'thing else; but that under the gospel dispensation he sees no reason or use for them.'¶

And, to come nearer our own times, Cornelius Agrippa, though a sceptic in most of the subjects which he has written on, declaims with great vehemence against cathedral music, which he says is 'so licentious, that the divine offices, holy mysteries, and prayers are chanted by a company of wanton musicians, hired with great sums of money, not to edify the understanding, but to tickle the ears of their auditory. The church,' he adds, 'is filled with noise and clamour, the boys whining the descant, while some bellow the tenor, and others bark the counterpoint; others again squeak the treble, while others grunt the bass; and they all contrive so, that though a great variety of sounds is heard, neither sentences, nor even words can be understood.'**

Erasmus, who, as having been while a boy a chorister, might be reasonably supposed to entertain a prejudice rather in favour of music than against it, has a passage to this purpose: 'There is, says he, a kind of music brought into divine worship which hinders people from distinctly understanding a word that is said; nor have the singers any leisure to mind what they sing; nor can the vulgar hear any thing but an empty sound, which delightfully glides into their ears. What notions, says he, have they of Christ, who think he is pleased with such a noise?'

And in another place he thus complains: 'We have brought a tedious and capricious kind of music into the house of God, a tumultuous noise of different voices, such as I think was never heard in the theatres either of the Greeks or Romans, for the keeping up whereof whole flocks of boys are maintained at a great expence, whose time is spent in learning such gibble-gabble, while they are taught nothing that is either good or useful. Whole troops of lazy lubbers are also maintained solely for the same purpose; at such an expence is the church for a thing that is pestiferous.' Whereupon he expresses a wish 'that it were exactly calculated how many poor men might be relieved and maintained out of the salaries of these singers;' and concludes with a reflection on the English for their fondness of this kind for service.††

Zuinglius, notwithstanding he was a lover of music, speaking of the ecclesiastical chanting, says, that that and the roaring in the churches, scarce understood by the priests themselves, are a foolish and vain abuse, and a most pernicious hindrance to piety.‡‡

But lest the suffrage of Zuinglius and Calvin, who speaks much in the same manner, should be thought exceptionable, it may not be amiss to produce that of cardinal Cajetan, who, though a great enemy to the reformers, agrees with them in declaring that it may be easily gathered from 1 Corinthians xiv. that it is much more agreeable to the apostle's mind that the sacred offices should be distinctly recited and intelligibly performed in the church, without musical

¶ In. 21. Qu. 91. a. 2. 4.

** De Vanitate et Incurtitudine Scientiarum, cap. 17.

†† Comment on 1. Corinth. xiv. 19.

‡‡ Zuinglii Act. Diap. pag. 106.

* Confess. lib. X. cap. 33. † Epist. 119. ‡ Epist. ad Rusticum.

§ De Eccl. Off. lib. I. cap. 5. || De Institut. Cleric. lib. II. cap. 48.

and artificial harmony, than so managed, as that with the noise of organs and the clamorous divisions, and absurd repetitions of affected singers, which seem as it were devised on purpose to darken the sense, the auditors should be so confounded as that no one should be able to understand what was sung.

Polydore Virgil, though an Italian, and of the Romish communion, writes to the same purpose: 'How, says he, the chanters make a noise in the church, and nothing is heard there but a voice; and others who are present rest satisfied with the consent of the cries, no way regarding the meaning of the words. And so it is, that among the multitude all the esteem of divine worship seems to rely on the chanters, notwithstanding generally no men are lighter or more wicked.' And speaking of the choir service in general, he adds: 'I may say that this, and the ceremonies attending it, are for the most part brought into our worship from the old Heathens, who were wont to sacrifice with symphony, as Livy, lib. IX. witnesseth.*

Lindanus, bishop of Ruremonde, speaking of the musicians and singers that had possessed the church after the Reformation, complains that their music is nothing but a theatrical confusion of sounds, tending rather to avert the minds of the hearers from what is good, than raise them to God; and declares that he had often been present, and as attentive as he could well be to what was sung, yet could he hardly understand any thing, the whole service was so filled with repetitions, and a confusion of different voices and tones and rude clamours. And thereupon he commends those who had expelled this sort of music out of their churches as a mere human device, and a profane hindrance of divine worship.†

To these censures of individuals some have added that implied in the decree of the council of Trent, made anno 1562, for correcting abuses in the celebration of the mass, not distinguishing between the use and the abuse of the subject in question.

Such are the authorities usually insisted on against the practice of antiphonal singing in cathedral churches, against which it might be objected, that the arguments, if such they may be called, of the several writers above-mentioned, seem less calculated to convince the reason than to inflame the passions of those who should attend to them; that allowing them all their weight, they conclude rather against the abuse of singing than the practice itself: and that all of those writers who have been thus free in their censures of church-music, were not so well skilled in the science as to be justifiable for pretending to give any opinion at all about it. Polydore Virgil has never yet been deemed a very respectable authority either for facts or opinions; and as to Cornelius Agrippa, the author of a book which the world have long stood in doubt whether to approve or condemn, choral singing might well seem confusion to him, who was so grossly ignorant in the science of music, as not to know the difference between the harmonical and metrical modes, and who has charged the

ancients with confusion in the modes of time, which were not invented till the middle of the eleventh century.‡

Against the objections of these men choral service has been defended by arguments drawn from the practice of the primitive church, and its tendency to edification; these are largely insisted on by Durandus, cardinal Bona, and others of the liturgical writers. As to the censure of the council of Trent, it regarded only the abuses of church-music; for it forbids only the use of music in churches mixed with lascivious songs, and certain indecencies in the performance of it which the singers had given into; § and as it was designed to bring it back to that standard of purity from which it had departed, it justified the decent and genuine use of it, and gave such authority to choral or antiphonal singing, that its lawfulness and expediency has long ceased to be a subject of controversy, except in the reformed churches; and in these a diversity of opinion still remains. The Calvinists content themselves with a plain metrical psalmody, but the Lutheran and episcopal churches have a solemn musical service. The original opponents of that of the church of England were the primitive Puritans; the force of their objections to it is contained in the writings of their champion Thomas Cartwright, in the course of the disciplinarian controversy; and to these Hooker, in his Ecclesiastical Polity, has given what many persons think a satisfactory answer. The arguments of each are referred to in a subsequent part of this work.

However, these are merely speculative opinions, into which it were to little purpose to seek either for the causes that contributed to the establishment of choral music, or for the reasons that influenced those who opposed its admission, since in their determinations the bulk of mankind are actuated by considerations very remote from the reasonableness or propriety of any. The fact is, that the fathers above-mentioned, from a persuasion of its utility and agreeableness to the word of God, laboured to introduce it into the church; and it is no less certain, that chiefly on the score of its novelty it met with great opposition from the common people; for, not to mention the tumults which the introduction of it occasioned at Constantinople, and the concessions which St. Chrysostom thereupon made, it appears that when Gregory the Great, in 620, sent the Cantus Gregorianus into Britain by Austin the monk, the clergy were so little disposed to receive it, that the endeavours to establish it occasioned the slaughter of no fewer than twelve hundred of them at once; and it was not till fifty years after, when Vitalianus sent Theodore the Greek to fill up the vacant see of Canturbury, that the clergy of this island could be prevailed on either to celebrate the Paschal solemnity, the precise time for which was then a subject of great controversy, or to acquiesce in the admission of cathedral service in the manner required by the Romish ritual; nor did they then do it so willingly but that the pope about nine

‡ Corn. Agrippa in loc. citat.

§ 'L'uso delle musiche nelle chiese con mistura di canto, è suono lascivo, tutte le attioni secolari, colloqui profani, strepiti, gridar. Hist. del Concil. Trident. di Pietro Soave, Londra, 1619, pag. 466.

* De Invent. Rerum. lib. VI. cap. ii.

† Lindan. Panopolis, lib. V. cap. vii.

years after, found himself under the necessity of sending hither the principal singer of the church of St. Peter at Rome, who taught the Britons the Roman method of singing, so that the true era of cathedral music in this our land is to be fixed at about the year of our Lord 679.

But in France the business went on still less smoothly than in Britain, for which reason Adrian taking advantage of the obligation he had conferred on Charlemagne, by making him emperor of the West, stipulated with him for the introduction of the Cantus Gregorianus into the Gallic church: the account of this memorable transaction is thus given by Baronius. 'In the year 787 the emperor kept his Easter with pope Adrian at Rome; and in those days of festivity there arose a great contention between the French and Roman singers. The French pretended to sing more gravely and decently, the Romans more melodiously and artificially, and each mightily undervalued the other. The emperor yielded to the pope, and made his own servants submit; and thereupon he took back with him Theodore and Benedict, two excellent Roman singers, to instruct his countrymen. The pope also presented him with the Roman antiphonary, which the emperor promised him should be generally used throughout his dominions; and upon his return to France he placed one of these artists in the city of Metz, ordering that the singers should from all the cities in France resort hither to be taught by him the true method of singing and playing on the organ.*

Thus the matter stood at about the end of the eighth century, by which time all actual opposition to cathedral music was pretty well calmed; and, saving the objections above-cited, which seem rather to apply to the abuse of it than the practice itself, church-music may be said to have met with no interruption for upwards of seven centuries. On the contrary, during all that period the church of Rome, with a sedulous application continued its utmost endeavours to cultivate it. And from the time that Franchinus became a public professor of the science, the younger clergy betook themselves with great assiduity to the study of music, for which no adequate cause can be assigned other than that it was looked on as the ready road to ecclesiastical preferment.

Nor was it from those popes alone who were skilled in, or entertained a passion for the science, that music received protection; others of them there were, who, influenced by considerations merely political, contributed to encourage it; the dignity, the splendor, and magnificence of the Roman worship seemed to demand every assistance that the arts could afford. All the world knows how much of the perfection which painting has arrived at, is owing to the encouragement given by the church to its professors: Michael Angelo and Raphael were almost solely employed in adorning the church of St. Peter and the Vatican with sculptures and scripture-histories; and from motives of a similar nature the greatest

encouragements were given to musicians to devote their studies to that species of composition which is suited to the ends of divine worship; and to the perfection of this kind of music the circumstances of the times were very fortunate: for notwithstanding the extreme licence taken by persons of rank and opulence at Rome, and indeed throughout all Italy, and that unbounded love of pleasure, which even in the fourteenth century had fixed the characteristic of Italian manners, it does appear that much of their enjoyment was derived from such public spectacles as to the other powers of fascination add music; and that masquerades, feasting, and gallantry were with them the principal sources of sensual gratification. The musical drama, or what is now called the opera, was not then known; the consequence whereof was, that the church not having then, as now, the stage for its competitor, had it in its power to attach the most eminent professors of the science to its service, and to render the studies of a whole faculty subservient to its purposes.

To this concurrence of circumstances, and a disposition in those whose duty led them to attend to the interests of religion, to which may be added that theoretical skill in the science, which Franchinus had by his public lectures disseminated throughout Italy, are owing the improvements which we find to have been made in the art of practical composition by the end of the sixteenth century. The prodigious havoc and destruction which was made in the conventual and other libraries, not only in England, at the dissolution of monasteries, but in France and Flanders also, in consequence of those commotions which the reformation of religion occasioned, have left us but few of those compositions from whence a comparison might be drawn between the church-music of the period now spoken of, and that of the more early ages; but from the few fragments of the latter now remaining in manuscript, it appears to be of a very inartificial texture, and totally void of those excellencies that distinguish the productions of succeeding times. Nor indeed could it possibly be otherwise while the precepts of the science inculcated nothing more than the doctrine of counterpoint and the nature of the canto fermo, a kind of harmony simple and unadorned, and in the performance scarcely above the capacities of those who in singing had no other guide than their ear and memory; in short, a species of music that derived not the least advantage from any difference among themselves in respect of the length or duration of the notes, which all men know is an inexhaustible source of variety and delight.

But the assigning of different lengths to sounds, the invention of pauses, or rests, the establishment of metrical laws, and the regulating the motion of a great variety of parts by the tactus or beat, whereby an union of harmony and metre was effected, were improvements of great importance; from these sprang the invention of fugue and canon, and those infinitely various combinations of tone and time which distinguish the canto figurato from the canto fermo, or ecclesiastical plain-song.

* A circumstantial account of this event, as related by Durandus and cardinal Baronius, is given in book IV. chap. 30. of this work.

The principal motive to these improvements was undoubtedly the great encouragement given to students and professors of music by the court of Rome. Those writers, who, to palliate the vices of Leo X. insist on his love of learning, and the patronage afforded by him to the professors of all the finer arts, ascribe the perfection of music among the rest to his munificence; but in this they are mistaken; an emulation to promote music prevailed at this time throughout Europe, and the temporal princes were not less disposed to favour its improvement than even the pontiffs themselves; our own Henry VIII. not only sang, but was possessed of a degree of skill in the art of practical composition equal to that of many of its ablest professors, as appears by many of his works now extant. Francis the First of France reckoned Joannes Mouton, his chapel-master, and Crequillon, among the chief ornaments of his court; and the emperor Charles V. by his bounty to musicians had drawn many of the most celebrated then in Europe to settle in Germany and the Low Countries.

Such was the general state of the church-service in Europe in the age immediately preceding the Reformation, at the time whereof it is well known choral music underwent a very great change; the nature of this change, and the precise difference between the Romish and the other reformed churches in this respect will best appear by a comparison of their several offices; nevertheless a very cursory view of the Romish ritual, particularly of the missal, the gradual, and the antiphony, will serve to shew that the greater part of the service of that church was sung to musical notes. In the Antwerp edition of the missal, printed MDLXXVIII. conformable to the decree of the council of Trent, the suffrages and responses are printed with notes, which are included within a stave of four red lines. The offices in usum Sarisburiensis, as they are termed, contained in the Missal, the Manual, the Processional, and other books, nay even those for the consecration of salt, of water, tapers, and ashes, are in like manner printed with musical notes. These it must be supposed, as they are for the most part extremely plain and simple, were intended for common and ordinary occasions; in short, they are that kind of plain-chant which is easily retained in the memory, and in which the whole of a congregation might without any dissonance or confusion join.

But the splendour and magnificence of the Romish worship is only to be judged of by the manner of celebrating divine service upon great festivals, and other solemn occasions, and that too in cathedrals and conventual churches, and in those abbeys and monasteries where either the munificence of the state, or an ample endowment, afforded the means of sustaining the expense of a choir. In these cases the mass was sung by a numerous choir, composed of men and boys, sufficiently skilled in the practice of choral service, to music of a very elaborate and artificial contexture; in the composition whereof the strict rules of the tonal melody were dispensed with,

and the greatest latitude was allowed for the exercise of the powers of invention.

However, this mode of solemn service was not restrained to cathedral, collegiate, and conventual churches, it was practised also in the royal and universal chapels, and in the domestic chapels of the dignitaries of the church, and of the higher orders of nobility. Cavendish, in his life of cardinal Wolsey, relating the order and offices of his house and chapel, gives the following account of the latter:—

'Now I will declare unto you the officers of his 'chapel, and singing-men of the same. First, he 'had there a dean, a great divine, and a man of excellent learning; and a subdean, a repeatour of the 'quire, a gospeller and epistoller; of singing priests 'ten. A master of the children. The seculars of the 'chapel, being singing-men, twelve. Singing 'children ten, with one servant to wait upon the 'children. In the vestry a yeoman and two grooms; 'over and besides other retainers that came thither 'at principal feasts. And for the furniture of his 'chapel, it passeth my weak capacity to declare the 'number of the costly ornaments and rich jewells 'that were occupied in the same. For I have seen 'in procession about the hall forty-four rich copea, 'besides the rich candlesticks and other necessary 'ornaments to the furniture of the same.*

Besides the higher dignitaries of the church, such as the archbishop of Canterbury, the bishops of Durham and Winchester, while those bishopricks were not held in commendam by the cardinal, and perhaps some others, whose station might require it, there were several among the principal nobility who seemed to emulate Wolsey in this particular, and had the solemn choral service performed in the chapels of their respective palaces and houses. One of these was the earl of Northumberland, whose great possessions and ample jurisdiction seem to have been adequate to, and to warrant every degree of magnificence under that of a king; for it appears that at the seat of the earl of Northumberland, contemporary with Wolsey, there was a chapel, in which, to judge from the number and qualifications of the persons retained for that purpose, it should seem that choral service was performed with the same degree of solemnity as in cathedral and conventual churches. The evidence of this fact is contained in an ancient manuscript of the Percy family, purporting to be the regulations and establishment of the household of Henry Algernon Percy, the fifth earl of Northumber-

* The state and dignity in which Wolsey lived, seemed to require a retinue of secular musicians; and accordingly we find that he held a company of such attending him, which, upon some occasions, he lent to the King. To this purpose, Stow, in his *Annals*, p. 535, relates a fact which is here given in his own words:—'There was not only plenty of fine meats, but also much 'mirth and solace, as well in merry communication, as with the noise of my 'Lord's minstrels, who played there all that night so cunningly, that the 'King took therein great pleasure; inasmuch that he desired my Lord to 'lend them unto him for the next night, and after supper their banquet 'Anished, the ladies and gentlemen fell to dauncing, among whom, one 'Madame Fontaine, a maide, had the price. And thus passed they the 'most part of the night ere they departed. The next day the King took my 'Lord's minstrels, and rode to a nobleman's house where was some image to 'whom he vowed a pilgrimage, to performe his devotions. When he came 'there, which was in the night, hee daunced and caused other to doe the same. 'after the sound of my Lord's minstrels, who played there all night, and 'never rested, so that whether it were with extreme labour of blowing, or 'with payson (as some iudged) because they were commended by the King 'more than his owne, I cannot tell, but the player on the shalme (who was 'very excellent in that instrument) dyed within a day or two after!'

land, at his castles of Wresill and Lekingfield in Yorkshire, begun anno domini MDXII. By this it appears that the earl had his dean and subdean of the chapel, a gospeller and pistoler, gentlemen and children of the chapel, an organist, and, in short, the same officers and retainers as were employed in the royal and other chapels; and as to their number, it appears by the following entries in the manuscript above referred to:—

‘Gentyllmen and Childern of the Chapell.

‘Item. Gentyllmen and childryn of the chapell xiiij, viz., gentyllmen of the chapell viii, viz., ij bassys, ij tenors, and iiij countertenours—yoman or grome of the vestry j—childern of the chapell v, viz., ij tribills and ij meanyes—xiiij.

‘Gentilmen of the chapel ix, viz., the maister of the childre j—tenors ij—countertenors iiij—the pistoler j—and oone for the orgayns—childer of the chapell vj.

The wages of the dean, the gentlemen, and the children of the chapel, are thus ascertained:—

‘The dean of the chapel iiij l. if he have it in housholde and not by patentt.*

‘Gentillmen of the chapel x, as to say two at x marc a pece—three at iiij l. a pece—two at v marc a pece—oone at xls.—and oone at xxs. viz., ij bassys, ij tenors, and vj countertenors—childern of the chapel vj, after xxvs. the pece.

‘The gentlemen and childrin of my lordis chapell whiche be not appointid to attend at no tyme, but oonly in exercising of Goddis service in the chappell daily at Mattins, Lady-Mass, Highe-Mass, Even-songe, and Complynge.

‘Gentlemen of my lordis chappell.

‘Furst, a bass. Item, a seconde bass. Item, the third bass. Item, a maister of the childer, a countertenour. Item, a second countertenour. Item, a third countertenour. Item, a iiijth countertenour. Item, a standing tenour. Item, a second standing tenour. Item, a iijd standing tenour. Item, a fourth standing tenour.

‘Childrin of my lordis chappell.

‘Item, the fyrst child a tribble. Item, the ijd child a tribble. Item, the iijd child a tribble. Item, the iiijth child a second tribble. Item, the vth child a second tribble. Item, the vjth child a second tribble.

‘The noubre of thois parsons as childrin of my lordis chapell vj.’

The wages or stipends severally assigned to the gentlemen and children of the above establishment have already been mentioned; provision was also made for their maintenance in this noble family, as appears by the following articles respecting their diet:—

‘Braikfast in Lent for ij meas [mess] of gentilmen o’ th’ chapell, and a meas of childern, ij loofs of brede, a gallon dimid [half] of bere, and ij peces of salt fish or ells, iiij white herryng to a meas—iij.’

And in another place their ordinary breakfast is directed to be—

‘ij loif of household bred, a gallon dimid of bere, and ij peces of beif boylid.—j

— Braikfasts for ij meas of gentilmen o’ th’ chappell,

* The wages of the dean, considering the dignity of his station, seem greatly disproportionate to those of the gentlemen of the chapel, two of whom are assigned ten marks, or 6l. 13s. 4d. a piece: what was the difference between having the office in household and by patent does not appear; if it could be ascertained it might account for this seeming inequality.

‘and a meas of childer, ij loifs of household breid, a gallon dimid of bere, and a pece of salt-fische.

‘Service for iiij meas of gentyllmen and childre of the chapell at suppar upon Tewisday in the Rogacion days, furst x gentyllmen and vj childre of the chapel iiij meas.

‘Service for gentyllmen and childer o’ th’ chapell, to every meas a loof of bred, a pottell of bere, half a dysch of buttre, and a pece of salt-fische, viij dyschis.’†

Besides these assignments, they had also liveries of white or wax-lights, of fagots, and of coals for fuel; provision was also made for the washing of Albes† and surplices for the gentlemen and children of the chapel, and also of altar-cloths; the times of washing them were regulated by the festivals that occur in the course of the year, and the rate of payment to the launderer was a penny for every three surplices. The whole expense of washing linen for the chapel as thus ascertained, was estimated at seventeen shillings and four pence a year, and the amount of the chapel-wages for a year was thirty-five pounds fifteen shillings.

‘The orderynge of my lordes Chapell in the queare at mattynge, mass, and evynsonge. To stonde in ordure as hereafter followeth, syde for syde daily:—

‘The deane side.

‘The Deane.

‘The subdeane.

‘A basse.

‘A tenor.

‘A countertenor.

‘A countertenor.

‘A countertenor.

‘The seconde side.

‘The Lady-masse priest.

‘The gospeller.

‘A basse.

‘A countertenor.

‘A countertenor.

‘A tenor.

‘A countertenor.

‘A tenor.

† The regimen of diet prescribed by the book from which the above extracts are made, was, with a few variations extended to the whole family: the following regulations respect the breakfasts of the earl and the countess and their children during Lent:—

‘Braikfast for my lorde and my lady.

‘Furst, a loif of brede in trenchers, ij manchetta, a quart of bere, a quart of wyne, ij pecys of salt-fisch, vj baconn’d herryng, iiij white herryng, or a dish of sproits—j.

‘Braikfaste for my lorde Percy and maister Thomas Percy.

‘Item, half a loif of household brede, a manchet, a pottell of bere, a dysch of butter, and a pece of salt-fish, a dysch of sproits, or ij white herryng—j.

‘Braikfaste for the nurey for my lady Margaret and maister

‘Ingram Percy.

‘Item, a manchet, a quart of bere, a dysch of butter, a pece of salt-fisch, a dysch of sproits, or ij white herryng—j.’

And, excepting the season of Lent and fish-days, the ordinary allowance for this part of the family throughout the year was as follows:

‘Braikfastis of flesch days dayly thorowte the yere.

‘Braikfastis for my lorde and my lady.

‘Furst, a loof of brede in trenchers, ij manchetta, j quart of bere, a quart of wyne, half a chyne of muton, or ells a chyne of beef boyled—j.

‘Braikfastis for my lorde Percy and Mr. Thomas Percy.

‘Item halfe a loif of household breide, a manchet, j pottell of bere, a chekyng or ells ij mutton bonys boyled—j.

‘Braikfasts for the nurey for my lady Margaret and Mr. Ingram Percy.

‘Item, a manchet, j quart of bere, and ij mutton bonys boyled.’

The system of household economy established in this family must be supposed to correspond with the practice of the whole kingdom, and enables us to trace the progress of refinement, and in short, to form an estimate of national manners at two remote periods.

† The Alb is a white linen garment, and is frequently mistaken for the surplice, though the rubric at the end of the first liturgy of Edward VI. and also that before morning prayer in the second liturgy of the same king, has clearly distinguished between them; but as described by Durandus, Ration. Divin. Officior. lib. III. cap. III. De Tunica, it is a garment made fit and close to the body, tied round the waist of the wearer with a girdle or sash. In the picture of the communion of St. Jerome by Dominichino, of which there is a fine print by Jacomo Frey, is the figure of a young man kneeling, with a book under his arm, having for his outer garment an alb. The Alb was anciently embroidered with various colours, and ornamented with fringe. See Bingham’s Antiquities, book XIII. chap. viii. § 2. Wheatley on the Common Prayer, chap. II. sect. 4.

'The ordurynge of my lordes chappell for the keapinge
'of our Ladyes mass thorowte the weike.

'Sunday.

'Monday.

'Master of the Childer a
'countertenor.
'A tenour.
'A tenour.
'A basse.

'Master of the Childer a
'Countertenor.
'A countertenour.
'A counter-tenour,
'A tenor.

'Twisday.

'Wedynsaday

'Master of the childer a
'countertenour.
'A countertenour.
'A countertenour.
'A tenour.

'Master of the childer a
'countertenor
'A countertenour.
'A tenour.
'A basse.

'Thursdaie.

'Fryday.

Master of the childer a
'countertenor.
'A countertenoure.
'A countertenoure.
'A tenoure.

'Master of the childer a
'countertenor.
'A countertenour.
'A countertenour.
'A basse.

'Satturday.

'Fryday.

'Master of the childer a
'countertenor
'A countertenor.
'A countertenor.
'A tenour.

'And upon the saide
'Friday th'ool chappell,
'and evry day in the
'weike when my lord
'shall be present at the
'saide masse.

'The ordurynge for keapinge weikly of the orgayns
'one after an outhr as the namys of them hereafter
'followith weikly:—

'The maister of the childer, yf he be a player, the
'first weike.

'A countertenor that is a player the ijde weike.

'A tenor that is a player the thirde weike.

'A basse that is a player the iijth weike.

'And every man that is a player to keep his cours
weikly.'

CHAP. LXXXII.

It is probable that Wolsey looked upon this establishment with a jealous eye. The earl might be said to be his neighbour, at least he lived in the cardinal's diocese of York, and such emulation of pontifical magnificence in a layman could hardly be brooked; be that as it may, it is certain that upon the decease of the above-mentioned earl of Northumberland, the cardinal's intention was to deprive his successor of the means of continuing the solemn service in the family, by requiring of him the books used in the chapel of his father: what pretext he could frame for such a demand, or what reasons, other than the dread of offending him, might induce the young earl to comply with it, it is not easy to guess, but the books were delivered to him, and the earl had no other resource than the hope of being able one time or other to set up a chapel of his own, which he expresses in a letter to one of his friends, yet extant in the Northumberland family, a copy whereof is given below.*

* Bedfellowe.

'After my most harté recomendacion: thys Monday the ijde off August
'I receyvd by my servaunt letters, from yowe beryng datt the xth day
'off July, deleveryd unto hym the sayme day, at the king's town of
'Newcastell; wherein I do perceyff my lord cardenalls pleasour ys to
'have such boks as was in the chappell of my lat lord and fayther, (wos
'eoll Jhesu pardon) to the accomplisshment off which at your deeyer

From the foregoing account of the rise and progress of choral music, it appears, that notwithstanding the abuses that might naturally be supposed to arise from an over zeal to improve and cultivate it, and in spite of the arguments and objections from time to time urged against it, as a practice tending rather to the injury than the advantage of religion, it not only was capable of maintaining its ground, but by the middle of the sixteenth century was arrived at great perfection. It farther appears that the objections against it, many of which were urged with a view to banish music, or at least antiphonal singing, from the church-service, produced an effect directly the contrary, and were the cause of a reformation that conduced to its establishment.

For it seems the objections against choral service had acquired such weight, as to be thought a subject worthy the deliberation of the council of Trent, in which assembly it was urged as one of the abuses in the celebration of the mass, that hymns, some of a profane, and others of a lascivious nature, had crept into the service, and had given great scandal to the professors of religion. The abuses complained of were severally debated in the council, and were reformed by that decree, under which the form of the mass as now settled derives its authority.

It is easy to discern that by this decree choral service acquired a sanction which before it wanted: till the time of passing it the practice of singing in churches rested solely on the arguments drawn from the usage of the Jews, and the exhortations contained in those passages in the epistles of St. Paul, which are constantly cited to prove it lawful; but this act of the council, which by professing to rectify abuses,

'I am confformable, notwithstanding I trust to be abell ons to set up a
'chappell off myne owne, but I pray God he may look better upon me
'than he doth. But methynk I have lost very moch pondering yt ys me
'better regardyd; the occasioun wheroff he shall perceayff.

'Fyrst, the long lyng off my tresorer; with hys vry haasty and un-
kynd words unto hym, not on my parte deservyd.

'Also the news of Mr. Manyng, the whych ys blon obroud over all
'Yorksher; that neither by the kyng nor by my lord cardenall I am
'regardyd; and that he wyll tell me at my metyng with him, when I com
'unto Yorksher; whych shall be within thys month, God wylling; but
'I fler my words to Mr. Manyng shall despleas my lord, for I wyll
'be no ward.

'Also, bedfellow, the payns I tak and have takyn sene my comyng
'hether are not better regardyd, but by a flateringe byshope off Caroll
'[Carlisle] and that fals worm (William Worme undermentioned) shall
'be broth [brought] to the messery and carfulness that I am in; and in
'such slanders, that now and my lord cardenall wold, he can not bryng
'me howth [out] theroff.

'I shall with all sped send up your letters with the books unto my lords
'grace, as to say, Hysantefonnare (antiphonare), such as I thynk wher met
'seen a gret wyll; v gralle [graduale] an ordcorly [ordinal], a manual,
'vllj processioners [processionals], and flur all the ressidew, they are
'not worth the sending nor ever was occuppyed in my lords chapel. And
'also I shall wryt at this tyme as ye have wrylled me.

'Yff my lords grace wyll be so good lord unto me as to gyff me lycheas
'[lyceance] to put Wyllm Worme within a castell of myn off Anwyll in
'assury, unto the tyme he have accompyed flur more money read than
'ever I read, I shall gyff hys grace ij C. li. and a benyffs off a C worth
'unto his colleyg, with such other thyngs reserved as his [grace] shall
'deyre; but unto such tyme as myne awdytors hayth takyn account off
'him: wher in, good bedfellow, do your best, for els he shall put us to
'send myself, as at owr metyng I shall show yow.

'And also gyff secuer credens unto this berer, whom I assur yow
'I have fouden a marvellous honest man as ever I floud in my lyff.
'In hast at my monestary off Hul-Park the ij day of August. In the
'owne hand off Yours ever assured

To my bedfellow Arundell.

H. NORTHUMBERLAND.

This earl of Northumberland was Henry Percy, the lover of Anne Boleyn; the person to whom the letter is addressed was Thomas Arundel, one of the gentlemen of the privy-chamber to cardinal Wolsey. There is another letter from the earl to the same person relating to Fountains Abbey in Yorkshire, in a curious work now publishing, Mr. Grose's Antiquities of England and Wales, Numb. XIII.

assumes and recognizes the practice, is as strong an assertion of its lawfulness and expediency as could have been contained in the most positive and explicit declaration.

This resolution of the council of Trent, an assembly, (if we may believe such writers as Pallavicini, and others of his communion,) the most august and awful that ever met for any purpose whatever, and acting, as they farther assert, under the immediate direction and influence of that spirit which Christ has said shall remain with his church, could hardly fail of exciting a most profound veneration for choral music in the members of the Romish church. Nor did it produce in the leaders of the Reformation that general aversion and abhorrence, which in many other instances they discovered against the determinations of that tribunal, in all human probability the last of the kind that the world will ever see: on the contrary, the Lutherans in a great measure adopted the Romish ritual, they too reformed the mass, and as to the choral service, they retained it, with as much of the splendour and magnificence attending it as their particular circumstances would allow of.

It must be confessed that the difference between the music of the Romish and reformed churches is in general very great; but it is to be remarked that some of the reformed churches differ more widely from that of Rome than others. The church of England retains so much of the ancient antiphonal method of singing, as to afford one pretence at least for a separation from it; and as to the Lutheran and Calvinistic churches, whatever may be their practice at this day, those persons greatly err who suppose that at the time of their establishment they were both equally averse to the ceremonies of that of Rome. In short, in the several histories of the Reformation we may discern a manifest difference between the conduct of Luther and Calvin with respect to the work they were jointly engaged in; the latter of these made not only the doctrine but the discipline of the church of Rome a ground of his separation from it, and seemed to make a direct opposition to popery the measure of his reformation; accordingly he formed a model of church government suited to the exigence of the times; rejected ceremonies, and abolished the mass, antiphonal singing, and, in a word, all choral service, instead of which latter he instituted a plain metrical psalmody, such as is now in use in most of the reformed churches.

But Luther, though a man of a much more irascible temper than his fellow-labourer, and who had manifested through the whole of his opposition to it a dauntless intrepidity, was in many instances disposed to temporize with the church of Rome; for upon a review of his conduct it will appear, first, that he opposed with the utmost vehemence the doctrine of indulgences; that he asserted not only the possibility of salvation through faith alone, but maintained that good works without faith were mortal sins, and yet that he submitted these his opinions to the judgment of the Pope, protesting that he never meant to question his power or that of the church.

In the next place he denied the real presence of Christ in the eucharist, but yet he substituted in its place that mode of existence called consubstantiation, which if not transubstantiation, is not less difficult than that to conceive of. Again, although he denied that the mass is what the church of Rome declares it to be, a propitiatory sacrifice, and was sensible that, according to the primitive usage, it was to be celebrated in the vulgar tongue, that the people might understand it; he in a great measure adopted the Romish ritual, and with a few variations permitted the celebration of it in the Latin. He allowed also of the use of crucifixes, though without adoration, in devotion, and of auricular confession, and in general was less an enemy to the superstitious rites and ceremonies of the church of Rome than either Calvin, Zuinglius, or any other of the reformers.

The effect of this diversity of opinions and conduct are evident in the different rituals of the Lutheran and Calvinistic churches in Switzerland, France, and the Low Countries; the Psalms of David were the only part of divine service allowed to be sung, and this too in a manner so simple and plain, as that the whole congregation might join in it. The Lutherans, on the contrary, affected in a great measure the pomp and magnificence of the Roman worship; they adhered to the use of the organ and other instruments; they had in many of their churches, particularly at Hamburg, Bremen, and Hesse Cassel, a precentor and choir of singers; and as to their music, it was not much less curious and artificial in its contexture than that of the church of Rome, which had so long been a ground of objection.

Few or none of the authors who have written the history of the Reformation have been so particular as to exhibit a formulary of the Lutheran service. Dr. Ward, in his *Lives of the Gresham Professors*, says 'that the Lutherans seem to have gone much 'the same length in retaining the solemn service as 'the church of England, though with more instruments and variety of harmony.' But the truth of the matter is, that they went much farther, as appears by a book, which can be considered no otherwise than as their liturgy, printed about seven years after Luther's decease, in folio, with the following title, '*Psalmodia, hoc est, Cantica sacra veteris ecclesiæ selecta. Quo ordine, et melodiis per totius anni curriculum cantari usitate solent in templis de Deo, et de filio ejus JESU CHRISTO, de regno ipsius, doctrina, vita, passione, resurrectione, et ascensione, et de Spiritu Sancto. Item de sanctis, et eorum in Christum fide et cruce. Jam primum ad ecclesiarum, et scholarum usum diligenter collecta, et brevis ac piis scholiis illustrata, per Lucam Loesium Lunenburgensem.*' Cum præfatione Philippi Melanthonis. Noribergæ Apud Gabrielem Hayn, Johan. Petrei generum, MDLIII.'

From this book it clearly appears that the Lutherans retained the mass, and sundry less exceptionable parts of the Romish service, as namely, the hymns and other ancient offices; a few of the more modern

* A particular account of Lucas Loesius is given in a subsequent page of this work.

hymns are said to have been written by Luther himself, the rest are taken from the Roman antiphony, gradual, and other ancient rituals; as to the music, it is by no means so strict as that to which the Romish offices are sung, nor does it seem in any degree framed according to the tonic laws; and it is highly probable that in the composition of it the ablest of the German musicians of the time were employed. Nay, there is reason to conjecture that even the musical notes to some of the hymns were composed by Luther himself, for that he was deeply skilled in the science is certain. Sleidan asserts that he paraphrased in the High German language, and set to a tune of his own composition, the forty-sixth Psalm,* 'Deus noster refugium.' Mr. Richardson the painter mentions a picture in the collection of the grand duke of Tuscany, painted by Giorgione, which he saw when he was abroad, of Luther playing on a harpsichord, his wife by him, and Bucer behind him, finely drawn and coloured.† And the late Mr. Handel was used to speak of a tradition, which all Germany acquiesced in, that Luther composed that well-known melody, which is given to the hundredth Psalm in the earliest editions of our English version, and continues to be sung to it even at this day.

And though this tune adapted to Psalm cxxxiv. occurs in Claude Le Jeune's book of psalm-tunes in four parts, published in 1613 by his sister Cécile Le Jeune, there is not the least pretence for saying that he composed the original tenor. Nay, the self-same melody is also the tenor-part of Psalm cxxxiv. in the Psalms of Goudimel, published in 1603, both these musicians professing only to adapt the three auxiliary parts of cantus, altus, and bassus, to the melodies as they found them.

If a judgment be made of the Lutheran service from the book now under consideration, it must be deemed to be little less solemn than that of the church of Rome; and from the great number of offices contained in it, all of which are required to be sung, and accordingly they are printed with the musical notes, it seems that the compilers of it were well aware of the efficacy of music in exciting devout affections in the minds of the people. The love which Luther entertained for, and his proficiency in music, has been already mentioned in the course of this work; but his sentiments touching the lawfulness of it in divine worship, and the advantages resulting to mankind, and to youth in particular, from the use of music both as a recreation and an incentive to piety, are contained in a book, known to the learned by the name of the *Colloquia Mensalia* of Dr. Martin Luther, the sixty-eighth chapter whereof is in these words:—

'Musick, said Luther, is one of the fairest and 'most glorious gifts of God, to which Satan is a 'bitter enemy; therewith many tribulations and 'evil cogitations are hunted away. It is one of the 'best arts; the notes give life to the text; it expelleth melancholie, as we see on king Saul. Kings

'and princes ought to preserve and maintain musick, 'for great potentates and rulers ought to protect good 'and liberal arts and laws; and altho private people 'have lust thereunto, and love the same, yet their 'ability cannot preserve and maintain it. We read 'in the Bible that the good and godly kings maintained and paid singers. Musick, said Luther, is the 'best solace for a sad and sorrowful minde, through 'which the heart is refreshed and settled again in 'peace, as is said by Virgil, "*Tu calamos inflare leves,* "*ego dicere versus*:" Sing thou the notes, I will sing 'the text. Musick is an half discipline and school-mistress, that maketh people more gentle and meek-minded, more modest and understanding. The base 'and evil fiddlers and minstrels serve thereto, that we 'see and hear how fine an art musick is, for white can 'never be better known than when black is held 'against it. Anno 1538, the 17th of December, 'Luther invited the singers and musicians to a 'supper, where they sung fair and sweet Motets; † then he said with admiration, seeing our Lord God 'in this life (which is but a mere *Cloaca*) shaketh 'out and presenteth unto us such precious gifts, what 'then will be done in the life everlasting, when every 'thing shall be made in the most compleat and 'delightfullest manner! but here is only *materia* 'prima, the beginning. I always loved musick, 'said Luther. Who hath skill in this art, the 'same is of good kind, fitted for all things. We 'must of necessity maintain musick in schools; a 'school-master ought to have skill in musick, otherwise I would not regard him; neither should we 'ordain young fellows to the office of preaching, 'except before they have been well exercised and 'practised in the school of musick. Musick is a fair 'gift of God, and near allied to divinity; I would 'not for a great matter, said Luther, be destitute of 'the small skill in musick which I have. The youth 'ought to be brought up and accustomed in this art, 'for it maketh fine and expert people.—Singing, 'said Luther, is the best art and practice; it hath 'nothing to do with the affairs of this world; it is 'not for the law, neither are singers full of cares, but 'merry, they drive away sorrow and cares with singing. I am glad, said Luther, that God hath bereaved 'the countrie clowns of such a great gift and comfort 'in that they neither hear nor regard music.—Luther 'once bad a harper play such a lesson as David 'played; I am persuaded, said he, if David now 'arose from the dead, so would he much admire how

† The *Motet* is a species of vocal harmony appropriated to the service of the church. The etymology of the word is not easily to be ascertained; Menage derives it from *Modus*, to which it bears not the least affinity. Butler, a motu, because, says he, 'the church songs called motets move 'the hearts of the hearers, striking into them a devout and reverent 'regard of them for whose praise they were made.' On Musick, pag. 3, in notes. Morley seems to acquiesce in this etymology, but understands motion in a sense different from Butler, as appears by these his words: 'A motet is properlie a song made for the church, either upon some 'hymne or anthem, or such like; and that name I take to have been 'given to that kinde of musike in opposition to the other, which they 'called Canto fermo, and we do commonlie call plain-song, for as nothing 'is more opposit to standing and firmness than motion, so did they give 'the motet that name of moving, because it is in a manner quight contrary to the other, which after some sort, and in respect of the other, 'standeth still.' Introd. part III. pag. 179.

Du Cange, voce *Motetum*, says that though this kind of composition is now confined to the church, it was originally of the most gay and lively nature; an opinion not inconsistent with the definition of the word.

* Comment. de Statu Religionis et Reipub. sub Carolo V. Cesare, lib. XVI.

† Account of Statues, Bas Reliefs, Drawings, and Pictures in Italy, pag. 73.

'this art of musick is come to so great and an ex-
'celling height; she never came higher than now
'she is. How is it, said Luther, that in carnal
'things we have so many fine poems, but in spiritual
'matters we have such cold and rotten things? and
'then he recited some German songs. I hold this
'to be the cause, as St. Paul saith, I see another law
'resisting in my members; these songs, added he,
'do not run in such sort as that of "*Vita ligno*
'*moritur*," which he much commended, and said
'that in the time of Gregory that and the like were
'composed, and were not before his time. They
'were, said he, fine ministers and school-masters
'that made such verses and poems as those I spake
'of, and afterwards also preserved them.—Marie the
'loving mother of God hath more and fairer songs
'presented unto her by the Papists than her childe
'Jesus; they are used in the Advent to sing a fair
'sequence "*Mittitur ad Virginem, &c.*" St. Mary
'was more celebrated in grammar, music, and
'rhetoric than her childe Jesus.—Whoso contemneth
'music, as all seducers do, with them, said Luther,
'I am not content. Next unto theology I give the
'place and highest honour to music, for thereby all an-
'ger is forgotten, the devil is driven away, unchastity,
'pride, and other blasphemies by music are expelled.
'We see also how David and all the saints brought
'their divine cogitations, their rhymes and songs
'into verse. *Quia pacis tempore regnat musica,*
'i. e. In the time of peace music flourishes.*

* The *Colloquia Mensalia*, a work curious in its kind, as it exhibits a lively portrait of its author, will hardly now be thought so excellent either for matter or form as to justify that veneration which we are told was formerly paid to it: the subject of it is miscellaneous, and its form that of a common place. In short, it answers to those collections which at sundry times have appeared in the world with the titles of Scaligerian, Menagiani, Parrhasiani, &c. which every one knows are too much in the style of common conversation to merit any great degree of esteem, and in short are calculated rather for transient amusement than instruction. But the publication of this book was attended with some such very singular circumstances as entitle it in no small degree to the attention of the curious.

The sayings of Luther were first collected by Dr. Anthony Lauterbach, and by him written in the German language. Afterwards they were dis-
posed into common places by John Aurifaber, doctor in divinity. A translation of the book was published at London in 1652, in folio, by one Captain Henry Bell; his motives for undertaking the work are contained in a narrative prefixed to it, which is as follows:

'I, Captain Henrie Bell, do hereby declare both to the present age and posterity, that being employed beyond the seas in state affairs diverse years together, both by king James and also by the late king Charles, in Germany, I did hear and understand in all places great bewailing and lamentation made by reason of the destroying and burning of above fourscore thousand of Martin Luther's books, entitled his last divine discourses.

'For after such time as God stirred up the spirit of Martin Luther to detect the corruptions and abuses of popery, and to preach Christ, and clearly to set forth the simplicity of the gospel, many kings, princes, and states, imperial cities, and Hans-towns fell from the popish religion and became protestants, as their posterities still are, and remain to this very day.

'And for the farther advancement of the great work of reformation then begun, the foresaid princes and the rest, did then order that the said divine discourses of Luther should forthwith be printed, and that every parish should have and receive one of the foresaid printed books into every church throughout all their principalities and dominions, to be chained up for the common people to read therein.

'Upon which divine work or discourses the reformation begun before in Germanie was wonderfully promoted and increased, and spread both here, in England, and other countries beside.

'But afterwards it so fell out, that the pope then living, viz. Gregory XIII. understanding what great hurt and prejudice he and his popish religion had already received by reason of the said Luther's divine discourses, and also fearing that the same might bring further contempt and mischief upon himself and upon the popish church, he therefore, to prevent the same, did fiercely stir up and instigate the emperor then in being, viz. Rudolphus II. to make an edict thorow the whole empire that all the foresaid printed books should be burned, and also that it should be death for any person to have or keep a copie thereof, but also to burn the same, which edict was speedily put in execution accordingly, inasmuch that not one of all the said printed books, nor so much as any one copie of the same could be found out nor heard of in any place.

From the several passages above collected, which it seems were taken from his own mouth as uttered by him at sundry times, it must necessarily be concluded, not only that Luther was a passionate admirer of music, but that he was skilled in it, all which considered, there is great reason to believe that the ritual of his church was framed either by himself or under his immediate direction.

It is more than probable that this institution of a new form of choral service by the Lutherans, co-operating with the censure of the council of Trent against singing, as then practised in churches, produced that plain and noble style of choral harmony, of which Palestrina is generally supposed to have been the father. This most admirable musician, who was Maestro di Capella of the church of St. Peter at Rome, with a degree of penetration and sagacity peculiar to himself, in the early part of his life discovered that the musicians his predecessors had in a great measure corrupted the science; he therefore rejecting those strange proportions which

'Yet it pleased God that anno 1526 a German gentleman, named Casparus Van Sparr, with whom in the time of my staying in Germany about king James's business I became very familiarly known and acquainted, having occasion to build upon the old foundation of an house wherein his grandfather dwelt at that time when the said edict was published in Germany for the burning of the foresaid book, and digging deep into the ground under the said old foundation, one of the said original printed books was there happily found lying in a deep obscure hole, being wrapped in a strong linen cloth, which was waxed all over with bees wax, within and without, whereby the book was preserved fair without any blemish.

'And at the same time Ferdinand II. being emperor in Germany, who was a severe enemy and persecutor of the protestant religion, the foresaid gentleman, and grand-child to him that had hidden the said book in that obscure hole, fearing that if the said emperor should get knowledge that one of the said books was yet forth coming, and in his custody, whereby not only himself might be brought into trouble, but also the book in danger to be destroyed as all the rest were so long before: and also calling me to minde and knowing that I had the High Dutch tongue very perfect, did send the said original book over hither into England unto me, and therewith did write unto me a letter, wherein he related the passages of the preserving and finding out of the said book.

'And also he earnestly moved me in his letter that for the advancement of God's glorie and of Christ's church, I would take the pains to translate the said book, to the end that that most excellent divine work of Luther might be brought again to light.

'Whereupon I took the said book before me, and many times began to translate the same, but alwaies I was hindered therein, being called upon about other business, inasmuch that by no possible means I could remain by that work. Then about six weeks after I had received the said book, it fell out that I being in bed with my wife one night between twelve and one of the clock, she being asleep, but myself yet awake, there appeared unto mee an ancient man standing at my bed side, arrayed all in white, having a long and broad white beard hanging down to his girdle-steel, who taking me by my right ear, spake these words following unto mee: "Sirrah, will not you take time to translate that book which is sent you out of Germany? I will shortly provide for you both place and time to do it." And then he vanished away out of my sight.

'Whereupon being much thereby affrighted, I fell into an extreme sweat, inasmuch that my wife awaking and finding me all over wet, she asked me what I ailed, I told her what I had seen and heard, but I never did heed nor regard visions nor dreams, and so the same fell soon out of my minde.

'Then about a fortnight after I had seen that vision, on a Sundae I went to Whitehall to hear the sermon after which ended I returned to my lodging, which was then in King-street at Westminster, and sitting down to dinner with my wife, two messengers were sent from the whole council board with a warrant to carry me to the keeper of the Gatehouse, Westminster, there to be safely kept until further order from the lords of the council, which was done without shewing me any cause at all wherefore I was committed. Upon which said warrant I was kept there ten whole years close prisoner, where I spent five years thereof about the translating of the said book, inasmuch as I found the words very true which the old man in the foresaid vision did say unto me, "I will shortly provide for you both place and time to translate it."

The author then proceeds to relate that by the interest of archbishop Laud he was discharged from his confinement, with a present of forty pounds in gold.

By a note in his narrative it appears that the cause of his commitment was that he was urgent with the lord treasurer for the payment of a long arrear of debt due from the government to him.

His translation of the *Colloquia Mensalia* was printed in pursuance of an order of the House of Commons, made 24 February, 1646.

few were able to sing truly, and which when sung excited more of wonder than delight in the hearer, sedulously applied himself to the study of harmony, and by the use of such combinations as naturally suggest themselves to a nice and unprejudiced ear, formed a style so simple, so pathetic, and withal so truly sublime, that his compositions for the church are even at this day looked on as the models of harmonical perfection.

CHAP. LXXXIII.

THE foregoing account of the rise and progress of church-music, or as it is most usually denominated, antiphonal singing, may in a great measure be said to include a history of the science itself so far downward as to the time of the Reformation; to what degree, and under what restraints it was admitted into the service of the reformed churches, will be the subject of future enquiry; in the interim, the order and course of this history require that the succession both of theoretic and practical musicians be continued from the period where it stopped, and that an account be given of that species of music which had its rise about the middle of the sixteenth century, namely, the dramatic kind, in which the Opera and Oratorio, as they are improperly called, are necessarily included.

Of the writers on music, the last hereinbefore mentioned is Peter Aron, a man more distinguished by his attachment to Bartholomew Ramis, the adversary of Franchinus, than by the merit of his own writings; he lived about the year 1545. The next writer of note was

MARTINUS AGRICOLA, chanter of the church of Magdeburg, who flourished about this period, and was an eminent theoretic and practical musician. In the year 1528 he published a treatise, which he intitled *Deutsche Music*; and in the year following another, intitled *Musica Instrumentalis*; both these were written in German verse, and were printed for George Rhaw of Wittenberg, who though a bookseller, was himself also a writer on music, and as such, an account has been given of him in the course of this work.* In the latter of these works are the representations of most of the instruments in use in his time. He was the author also of a tract on figurate music, in twelve chapters, and of a little treatise *De Proportionibus*; and of another in Latin, intitled *Rudimenta Musices*, for the use of schools; but his great work is that intitled *Melodiæ Scholasticæ sub Horarum Intervallis decantandæ*, published at Magdeburg in 1512, and mentioned by Draudius in his *Bibliotheca Classica Librorum Germanicorum*. He was the author also of a tract intitled '*Scholia in Musicam Planam Wenceslai Philomatis de Nova Domo ex variis Musicorum Scriptis pro Magdeburgensis Scholæ Tybus, collecta*,' in the preface to which he speaks thus of himself: '*Præterea, lector optime, cogitabis, me nequaquam potuisse singula artificiosissime tradere, quemadmodum alii excellentes musici, quum ego nunquam certo aliquo*

præceptore in hac arte usus sim, sed tanquam musicus atropus occulta quadam naturæ vi, qua me huc pertraxit, tum arduo labore atque domestico studio, id quod cuilibet perito facile est æstimare, Deo denique auspice, exiguum illud quod intelligo, sim assecutus, ut non omnino absolute, verum tantumquam aliquis vulgariter doctus, tantum simplicissime, adeoque rudibus hujus artis pueris principia præscribere, atque utcumque inculcare queam, non dissimilis arbori, cui spontanea contigit à terra pululatio, quæ nunquam sua bonitate respondet alteri arbori, quæ nunc ab ipso hortulano, loco opportuno plantatur ac deinceps etiam quotidie fovetur ac irrigatur.' In the year 1545 he republished his *Musica Instrumentalis*, and dedicated it to George Rhaw, but so much was it varied from the former edition, that it can scarce be called the same work; and indeed the first edition was by the author's own confession so difficult to be understood, that few could read it to any advantage. In this latter edition, besides explaining the fundamentals of music, the author enters very largely into a description of the instruments in use in his time, as namely, the Flute, Krumhorn, Zink, Bombardt, Sackpipe, Swiespipe, and the Shalmey, with the management of the tongue and the finger in playing on them. He also treats of the violin and lute, and shows how the gripe, as he calls it, of each of these instruments is to be divided or measured; he speaks also of the division of the monochord, and of a temperature for the organ and harpsichord. Agricola died on the tenth day of June, 1556, and in 1561 the heirs of George Rhaw published a work of his intitled '*Duo Libri Musices continentes Compendium Artis, et illustria Exempla; scripti à Martino Agricola, Silesio soraviensi, in gratiam eorum, qui in Schola Magdeburgensi prima Elementa Artis discere incipiunt.*'

The works of Agricola seem intended for the instruction of young beginners in the study of music; and though there is something whimsical in the thought of a scientific treatise composed in verse, it is probable that the author's view in it was the more forcibly to impress his instructions on the memory of those who were to profit by them. His *Musica Instrumentalis* seems to be a proper supplement to the *Musurgia* of Ottomar Luscinius, and is perhaps the first book of directions for the performance on any musical instrument, ever published. Martinus Agricola is sometimes confounded with another Agricola, whose Christian-name was Rudolphus, a divine by profession, but an excellent practical musician, and an admirable performer on the lute and on the organ. Such as know how to distinguish between these two persons, call Rudolphus the elder Agricola, and well they may, for he was born in the year 1442, at Baffen, a village in Friesland, two miles from Groningen, and dying in 1485 at Heidelberg, was buried in the Minorite church of that city, where is the following inscription to his memory:—

Invida clausurunt hoc marmore fata Rodolphum:
Agricolam, Frisii spemque decusque soli.
Scilicet hoc uno meruit Germania, laudis
Quicquid habet Latium, Græcia quicquid habet.

* Viz., book viii. chap. 69. page 314.

HENRICUS FABER flourished about the year 1540. He wrote a *Compendium Musicæ*, which has been printed many times, and *Compendiolum Musicæ pro Incipientibus*, printed at Frankfort in 1548, and again at Norimberg in 1679. He was rector of the college or public school of Quedlinburg for many years, and died anno 1598: the magistrates of that place erected a monument for him, upon which is the following inscription:—

Clariss. et Doctiss. Viro, M. Heinr. Fabro, optime de hac Scholâ merito monumentum hoc posuit Reipu. hajus Quedlinburg. Senatus.

Henrici ecce Fabri ora, Lector, omnis
Qui doctus bene liberalis artis,
Linguarumque trium probe peritus
Hanc rexit patriam Scholam tot annos,
Quot mensis numerat dies secundus,
Fide, dextertate, laude tanta,
Quantam et postera prædicabit ætas,
Nunc pestis violentia solutus
Isto, quod pedibus teris, sepulcro
In Christo placidam capit quietem,
Vitam pollicito sereniorum.

27 Aug. obiit An. 1598. cum vixisset annos LV.

CHRISTOPHER MORALES (*a Portrait*), a native of Sevil, was a singer in the pontifical chapel under Paul III. in or about the year 1544, and an excellent composer. He was the author of two collections of masses, the one for five voices, published at Lyons in 1545, the other for four voices, published at Venice in 1563, and of a famous Magnificat on the eight tones, printed at Venice in 1562. Mention is also made of a motet of his, 'Lamentabatur Jacob,' usually sung in the pope's chapel on the fourth Sunday in Lent, which a very good judge* styles 'una maraviglia dell' arte.'† He

* Andrea Adami da Bolsena, nelle sue Osservazioni per ben regolare il Coro de i Cantori della Cappella Pontificia. Rom. 1711.

† Christopher Morales is the first of eminence that occurs in the scanty list of Spanish musicians. The slow progress of music in Spain may in some degree be accounted for by the prevalence of Moorish manners and customs for many centuries in that country. The Spanish guitar is no other than the Arabian Pandura a little improved; and it is notorious that most of the Spanish dances are of Moorish or Arabian original. With respect to the theory of music, it does not appear to have been at all cultivated in Spain before the time of Salinas, who was born in the year 1513, and it is possible that in this science, as well as in those of geometry and astronomy, in physics, and other branches of learning, the Arabians, and those descended from them might be the teachers of the Spaniards. There is now in the library of the Escurial an Arabic manuscript with this title, 'Abi Nasser Mohammed Ben Mohammed Alfarabi 'Musices Elementa, adjectis Notis Musicis et Instrumentorum Figuris' plus triginta. CMVI.

As the date of this MS. and the age when the author lived are prior to the time of Guido Aretinus, we are very much at a loss to form a judgment of any system which could then prevail, other than that of the ancients, much less can we conceive of the forms of so great a variety of instruments as are said to be contained in it.

The author of this book is however sufficiently known. In the *Nouveau Dictionnaire Historique Portatif*, is the following article concerning him:—

'ALFARABUS lived in the tenth century. He did not, like most learned men of his country, employ himself in the interpretation of the 'dreams of the Koran, but penetrated the deepest recesses of abstruse and useful science, and acquired the character of the greatest philosopher among the Mussulmans. Nor was he more distinguished for his excellence in most branches of learning, than for his great skill in music, and his proficiency on various instruments. Some idea of the greatness of his talents may be formed from the following relation. Having made a pilgrimage to Mecca, and returning through Syria, he visited the court of the sultan Seïfoddoulet. At his arrival he found the sultan surrounded by a great number of learned men, who were met to confer on scientific subjects, and joining in the conversation, argued with such depth of judgment and force of reasoning, as convinced all that heard him. As soon as the conversation was at an end, the sultan ordered in his musicians, and Alfarabi taking an instrument, joined in the performance. Waiting for a seasonable opportunity, he took an instrument in his hand of the lute or pandura kind, and touched it so delicately, that he drew the eyes and attention of all that were present. Being requested to vary his style, he drew out of his pocket a song, which he sang and accompanied with such spirit and vivacity, as pro-

composed also the Lamentations of Jeremiah for four, five, and six voices, printed at Venice in 1564. A Gloria Patri of his is preserved in the Musurgia of Kircher, lib. VII. cap. vii. sect. ii.

GREGORIUS FABER, professor of music in the university of Tubingen in the duchy of Wirtemberg, published at Basil, in 1553, *Musices Practicæ Erotematum*, libri II. a book of merit in its way. In it are contained many compositions of Jusquin de Pres, Anthony Brumel, Okeghem, and other musicians of that time.

ADRIAN PETIT COOLICUS, who styles himself a disciple of Jusquin de Pres, was the author of a tract intitled *Compendium Musicæ*, printed at Norimberg in 1552, in which the musicians mentioned by Glareanus, with many others of that time, are celebrated. The subjects principally treated of by him are thus enumerated in the title-page, *De Modo ornato canendi—De Regula Contrapuncti—De Compositione*. To oblige his readers, this author at the beginning of his book has exhibited his own portrait at full length, his age fifty-two. It would be very difficult to describe in words the horrible idea which this representation gives of him. With a head of an enormous bigness, features the coarsest that can be imagined, a beard reaching to his knees, and clothed in a leather jerkin, he resembles a Samoed, or other human savage, more than a professor of the liberal sciences. But notwithstanding these singularities in the appearance of the author, his book has great merit.

LUIGI DENTICE, a gentleman of Naples, was the author of *Due Dialoghi della Musica*, published in 1552; the subjects whereof are chiefly the proportions and the modes of the ancients; in discoursing on these the author seems to have implicitly followed Boetius: there were two others of his name, musicians, who were also of Naples: the one named Fabricius is celebrated by Galilei in his *Dialogue* on ancient and modern Music, as a most exquisite performer on the lute. The other named Scipio is taken notice of in the *Musical Lexicon* of Walther. Adrian Le Roy, a bookseller of Paris, who in 1578 published *Briefve et facile Instruction pour apprendre la Tableture à bien accorder, conduire, et disposer la Main*

voked the whole company to laughter; with another he drew from them a flood of tears; and with a third laid them all asleep. After these proofs of his extraordinary talents, the sultan of Syria requested of Alfarabi to take up his residence in his court, but he excused himself, and departing homeward, was slain by robbers in a forest of Syria, in the year 954. Many of his works in MS. are yet in the public library at Leyden.

It must be confessed that the foregoing account carries with it much of the appearance of fable: the following, contained in Mr. Ockley's translation of Abu Jaafar Ebn Tophail's *Life of Hai Ebn Yekhdan*, is of the two perhaps the nearest the truth:—

'ALFARABUS, without exception the greatest of all the Mahometan philosophers, reckoned by some very near equal to Aristotle himself. Maimonides in his epistle to Rabbi Samuel Aben Tybbon, commends him highly; and though he allows Avicenna a great share of learning and acumen, yet he prefers Alfarabi to him. Nay, Avicenna himself confesses that when he had read over Aristotle's *Metaphysics* forty times, and gotten them by heart, he never understood them till he happened upon Alfarabi's exposition of them. He wrote books of rhetoric, music, logic, and all parts of philosophy; and his writings have been much esteemed not only by Mahometans, but Jews and Christians too. He was a person of singular abstinence and continence, and a despiser of the things of this world. He is called Alfarabi from Farab, the place of his birth, which, according to Alphubaldi, (who reckons his longitude, not from the Fortunate Islands, but from the extremity of the western continent of Africa) has 88 deg. 30 min. of longitude, and 44 deg. of northern latitude. He died at Damascus in the year of the Hegira 339, that is about the year of Christ 950, when he was about fourscore years old.'

sur la Guiterne, speaks in that book of a certain tuning of the lute, which was practised by Fabrice Dentice the Italian, and others his followers, from whence it is to be inferred that he was a celebrated performer on that instrument.

But of the many writers of this time, no one seems to have a better claim to the attention of a curious enquirer than

DON NICOLA VICENTINO, a writer whom it has already been found necessary frequently to take notice of in the preceding pages of this work, inasmuch as there are few modern books on music in which he is not for some purpose or other mentioned. He, in the year 1555, published at Rome a book intitled 'L'Antica Musica ridotta alla moderna prattica, con la dichiarazione et con gli essempli de i tre generi, con le loro apatie. Et con l'inventione di uno nuovo stromento, nel quale si contiene tutta la perfetta musica, con molti segreti musicali.'

In this work of Vicentino is a very circumstantial account of Guido; and, if we except that contained in the MS. of Waltham Holy Cross, and a short memoir in the *Annales Ecclesiastici* of Baronius, it is perhaps the most ancient history of his improvements any where to be found; it is not however totally free from errors; for he attributes the contrivance of the hand to Guido, the very mention whereof does not once occur either in the *Micrologus*, the *Epistle* to his friend Michael, or in any other of his writings.

In the account he gives of the cliffs or keys, he asserts that the characters now used to denote them

Ⓒ, ♯, H, Ⓔ are but so many corruptions of the letters F, C, G,* though he allows that the latter of the three continued in use long after the two former, of which there can be no doubt, since we find the letter Ⓒ used not only to denote the series of superacutes, but in *Fantasies* and other instrumental compositions it was constantly the signature of the treble or upper part, down to the end of the sixteenth century; the character now used for that purpose Ⓔ is manifestly derived from this Ⓒ which signifies *ga*, and was intended to signify the place of *G sol re ut*. He farther conjectures, that in order to distinguish the *Hexachords*, or, as others call them, the properties in singing, namely, in what cases *b* was to be sung by *FA*, and in what by *MI*, it was usual to affix two letters at the head of the stave, in the first case *G* and *F*, and in the last *C* and *G*.

The fourth chapter of the first book contains an account of John De Muris's invention of the eight notes, by which we are to understand those characters said to have been contrived by him to denote the time or duration of sounds, and of the subsequent improvements thereof; the whole is curious, but it is egregiously erroneous, as has been demonstrated.

He then proceeds to declare the nature of the consonances, and, with a confidence not unusual with the

* Kepler is of the same opinion, and has given an entertaining and probable relation of the gradual corruption of the cliffs in his *Harmonices Mundi*, the substance whereof is inserted in the account herein after given of him and his writings.

writers of that age, to attempt an explanation of that doctrine which had puzzled Boetius, and does not appear to have been clearly understood even by Ptolemy himself.

That Vicentino had studied music with great assiduity is not to be doubted, but it does not appear by his work that he had any knowledge of the ancients other than what he derived from Boetius, and those few of his own countrymen who had written on the subject. It was perhaps his ignorance of the ancients that led him into those absurdities with which he is charged by Doni and other writers in his attempts to render that part of the science familiar which must ever be considered as inscrutable; and as if the difficulty attending the doctrine of the genera were not enough, he has not only had the temerity to exhibit compositions of his own in each of the three severally, but has conjoined them in the same composition; for first, in the forty-eighth chapter of the third book is an example of the chromatic for four voices; in the fifty-first chapter of the same book is an example of the enarmonic for the same number; and in the fifty-fourth chapter is a composition also for four voices, in which the diatonic, the chromatic, and the enarmonic are all combined. These examples have a place in the preceding part of this work, and are there inserted to shew the infinite confusion arising from a commixture of the genera.

In the year 1551 Vicentino became engaged in a musical controversy, which terminated rather to his disadvantage: the occasion of it was accidental, but both the subject and the conduct of the dispute were curious, as will appear by the following narrative translated from the forty-third chapter of the fourth book of the work above-cited:—

'I, Don Nicola, being at Rome in the year of our Lord 1551, and being at a private academy where was singing, in our discourse on the subject of music, a dispute arose between the reverend Don Vincenzo Lusitano and myself, chiefly to this effect. Don Vincenzo asserted that the music now in use was of the diatonic genus, and I on the contrary maintained that what we now practise is a commixture of all the three genera, namely, the chromatic, the enarmonic, and the diatonic. I shall not mention the words that passed between us in the course of this dispute, but for brevity's sake proceed to tell that we laid a wager of two golden crowns, and chose two judges to determine the question, from whose sentence it was agreed between us there should be no appeal.

'Of these our judges the one was the reverend Messer Bartholomeo Escobedo, priest of the diocese of Segovia, the other was Messer Ghisilino Dancherts, a clerk of the diocese of Liege, both singers in the chapel of his holiness; † and in the presence of the most illustrious and most reverend lord Hyppolito da Este, Cardinal of Ferrara, my lord

† Escobedo is celebrated by Salinas in these words: Cum Bartholomeo Escobedo viro in utraque musices parte exercitissimo. De Musica, lib. IV. cap. xxii. pag. 338. And Ghisilino Dancherts is often mentioned in the preface to Andrea Adami's Osservazioni per ben regolare il Core de i Cantori della Cappella Pontificia, by the name of Ghisilino d'Ankerta Puntatore, i. e. precentor of the college of singers of the pontifical chapel. The same author, in his Osservazioni above-mentioned, pag. 163, styles d'Ankerta ottimo contrapuntista di madrigali.

'and master, and of many learned persons, and in the hearing of all the singers, this question was agitated in the chapel of his holiness, each of us, the parties, offering reasons and arguments in support of his opinion.

'It fortuneed that at one sitting, for there were many, when the Cardinal of Ferrara was present, one of our judges, namely, Ghisilino, being prevented by business of his own, could not attend. I therefore on the same day sent him a letter, intimating that in the presence of the Cardinal I had proved to Don Vincenzio that the music now in use was not simply the diatonic as he had asserted, but that the same was a mixture of the chromatic and enarmonic with the diatonic. Whether Don Vincenzio had any information that I had written thus to Ghisilino I know not, but he also wrote to him, and after a few days both the judges were unanimous, and gave sentence against me, as every one may see.

'This sentence in writing, signed by the above-named judges, they sent to the Cardinal of Ferrara, and the same was delivered to him in my presence by the hand of my adversary Don Vincenzio. My lord having read the sentence, told me I was condemned, and immediately I paid the two golden crowns. I will not rehearse the complaints of the Cardinal to Don Vincenzio of the wrong the judges had done me, because I would rather have lost 100 crowns than that occasion should have been given to such a prince to utter such words concerning me as he was necessitated to use in the hearing of such and so many witnesses as were then present. I will not enumerate the many requests that my adversary made to the Cardinal to deliver back the sentence of my unrighteous judges; I however obtained his permission to print it and publish it to the world, upon which Don Vincenzio redoubled his efforts to get out it of his hands, and for that purpose applied for many days to Monsignor Preposto de Troti, to whom the Cardinal had committed the care of the same.

'A few days after my lord and master returned to Ferrara, and after dwelling there for some time, was necessitated to go to Sienna, in which country at that time was a war; thither I also went, and dwelled a long time with much inquietude. After some stay there I returned to Ferrara, from whence I went with my lord and master to Rome, in which city by God's favour we now remain.

'I have said thus much, to the end that Don Vincenzio Lusitanio may not reprehend me if I have been slow in publishing the above sentence, which some time past I promised to do. The reasons why I have delayed it for four years are above related; I publish it now that every one may determine whether our differences were sufficiently understood by our judges, and whether their sentence was just or not. I publish also the reasons sent by me, and also those of Don Vincenzio, without any fraud, or the least augmentation or diminution, that all may read them.'

The following is a translation of a paper containing

the substance of Vincenzio's argument, intitled 'Il Tenore dell' Informatione manda Don Nicola à M. Ghisilino per sua prova':—

'I have proved to M. Lusitanio, that the music which we now practise is not simply diatonic, as he says. I have declared to him the rules of the three genera, and shewn that the diatonic sings by the degrees of a tone, tone and semitone, which indeed he has confessed. Now every one knows that our present music proceeds by the incomposite ditone, as from *ut* to *mi*, and by the trihemitone *ut* *fa*, without any intermediate note, which method of leaping is I say according to the chromatic genus; and I farther say that the interval *fa* *la* is of the enarmonic kind; and I say farther that the many intervals signified by these characters \sharp and \flat , which occur in our present music, shew it to partake of all the three genera, and not to be simply diatonic as M. Lusitanio asserts.'

The arguments on the other side of the question are contained in a paper intitled 'Il tenore dell' Informatione mandò Don Vincenzio Lusitanio à M. Ghisilino per sua prova,' and translated is as follows:—

'Signor Ghisilino, I believe I have sufficiently proved before the Cardinal of Ferrara, and given him to understand what kind of music it is that is composed at this day, by three chapters of Boetius, that is to say, the eleventh and the twenty-first of the first book,* in which are these words: "In his omnibus, secundum diatonicum cantilene, procedit vox per semitonium, tonum, ac tonum in uno tetrachordo. Rursus in alio tetrachordo, per semitonium, tonum, et tonum, ac deinceps. Ideoque vocatur diatonicum quasi quod per tonum ac per tonum progrediatur. Chroma autem (quod dicitur color,) quasi iam ab huiusmodi intentioni prima mutatio cantatur per semitonium et semitonium et tria semitonia. Toto enim diatessaron consonantia est duorum tonorum ac semitonii, sed non pleni. Tractum est autem hoc vocabulum ut diceretur chroma, à superficiebus, quæ cum permutantur in alium transeunt colorem. Enarmonium verò quod est maius coaptatum, est quod cantatur in omnibus tetracordis per diesin et diesin, et ditonum, &c."

'Being willing to prove by the above words the nature of the music in use at this day, it is to me very clear that it is of the diatonic kind, in that it proceeds through many tetrachords by semitone, tone and tone, whereas in the other genera, that is to say, the chromatic and enarmonic, no examples can be adduced from the modern practice of an entire progression by those intervals which severally constitute the chromatic and enarmonic; and I have shewn the nature of the diatonic from the fifth chapter of the fourth book of Boetius, beginning "Nunc igitur diatonicici generis descriptio facta est in eo, scilicet, modo qui est simplicior ac princeps quem Lidium nuncupamus."

'To this Don Nicola has objected that the melody above described is not the characteristic of the pure diatonic genus, because it admits of the semiditone

* This is a twofold mistake of Lusitanio: he has cited but two chapters of Boetius, and the eleventh of the first book contains nothing to his purpose.

'and ditone, which are both chromatic and enarmonic intervals; to which I answered, that both these never arose in one and the same tetrachord, which is an observation that Boetius himself has made; and I said that Don Nicola was deficient in the knowledge of the true chromatic, which consists in a progression by semitone and semitone, as also of the enarmonic, proceeding by diesis and diesis. As to the ditone and semiditone, they are common to all the genera, and are taken into the diatonic, as agreeing with the order of natural progression: and though Don Nicola would insinuate that the ditone and semiditone are not proper to the diatonic, he does not scruple nevertheless to call the genus so characterized the diatonic genus, which I affirm it is. I desire you will communicate to your companion these reasons of mine, and, as you promised the Cardinal of Ferrara, pronounce sentence on Sunday next. Vincentinus Lusitan.'

Vicentino observes upon this paper, that the two first chapters quoted by his adversary from Boetius make against him, and prove that opinion to be true which he, Vicentino, is contending for; and, in short, that both the chromatic and enarmonic intervals, as defined by Boetius, were used in the music in question, which consequently could not with propriety be deemed the pure and simple diatonic: he adds, that he will not arraign the sentence of his judges, nor say that they understood not the meaning of Boetius in the several chapters above-cited from him, but proceeds to relate an instance of his adversary's generosity, which after all that had passed must seem very extraordinary; his words are these:—

'The courtesy of Don Vincentino has been such, that having gained my two golden crowns and a sentence in his favour, and thereby overcome me, he has a second time overcome me by speaking against the sentence of my condemnation, and against the judges who have done him this favour; and in so doing he has truly overcome and perpetually obliged me to him: and moreover he has published to the world, and proved in one chapter of his own, that the sentence against me was unjust; nay, he has printed and published the reasons contained in the paper written by me, and sent to Messer Ghisilino, our judge; and this he has done as he says to discharge his conscience, and because it seemed to him that he had stolen the two golden Scudi.*—God forgive all, and I forgive him, because he has behaved like a good Christian; and to the end that every one may be convinced of the truth of what I now assert, I refer to a work of his intitled "Introductione facillissima et novissima di canto fermo et figurato

* In this controversy two things occur that must strike an intelligent reader with surprise: the one is that the two judges should concur in an opinion so manifestly erroneous as that the system in question, which was in truth no other than that now in use, was of the diatonic genus; the other is the concession of Lusitanio that it partook of all the three genera. The reader will recollect the sentiment of our countryman Morley on this head, who, after diligently enquiring into the matter, pronounces of the music of the moderns that it is not fully, and in every respect, the ancient diatonicum nor right chromaticum, but an imperfect commixture of both; and, to shew that it does not partake of the enarmonic, he remarks that we have not in our scale the enarmonic diesis, which is the half of the lesser semitone. Morley in the Annotations on the first part of his Introduction. Vide Brossard, Dictionaire de Musique. Voce SYSTEMA, to the same purpose.

"contrapunto semplice, &c. Stampata in Roma in "campo di Fiore per Antonio Blado, Impressore "Aposto. L'anno del Signore M.D.LIIL à li xxv. "di Settembre." At the end of this work he treats 'of the three genera of music in these words:—

"The genera or modes of musical progression are "three, viz., the Diatonic, which proceeds by four "sounds constituting the intervals of tone, tone, and "semitone minor, the Chromatic, which proceeds by "semitone, semitone major, and three semitones, "making in all five semitones, according to the "definition of Boetius in his twenty-first chapter; "and according to his twenty-third chapter, by "semitone minor, semitone major, and the interval "of a minor third, RE FA, not RE MI FA, because RE "FA is an incomposite, and RE MI FA is a composite "interval. The Enarmonic proceeds by a diesis, "diesis and third major in one interval, as UT MI, "not UT RE MI; the mark for the semitone minor is "this x, and that for the diesis is this x."

Vicentino remarks upon this chapter, that his adversary has admitted in it that the leap of the semiditone or minor third, RE FA or MI SOL, is of the chromatic genus, which position he says he had copied from Vicentino's paper given in to Messer Ghisilino; he then cites Vicentino's explanation of the enarmonic genus, where he characterizes the leap of a ditone or major third by the syllables UT MI. 'This,' says Vicentino, 'my adversary learned from the above paper, to which I say he is also beholden in other instances, for whereas he has boldly said that I understand not the chromatic, I say as boldly that he would not have understood it but for the above paper of mine; because whoever shall confront his printed treatise with that paper, will find that he has described the genera in the very words therein made use of; and his saying that he was able before he had seen it to give an example of chromatic music is not to be believed. Nay farther, in his paper to Messer Ghisilino he asserted that the ditone and semiditone are diatonic intervals, but in this treatise of his he maintains the direct contrary, saying that RE FA is not of the diatonic, but of the chromatic genus. Here it is to be observed that the enarmonic ditone is UT MI, and not UT RE MI. In short,' continues Vicentino, 'it is evident that what my adversary has printed contradicts the reasons contained in his written paper. In short, I am ashamed that this work of Don Vincentino is made public, for besides that it is a condemnation as well of himself as our judges, it shews that he knows not how to make the harmony upon the enarmonic diesis. Nay he has given examples with false fifths and false thirds; and moreover, when he speaks of a minor semitone, gives MI FA, and FA MI as an example of it. And again, is of opinion that the semitones as we now sing or tune them, are semitones minor, whereas in truth they are semitones major, as FA MI or MI FA.'

Vicentino proceeds to make good his charge by producing the following example from his adversary's printed work, of false harmony:—



'It much grieves me,' says Vicentino, 'that I am obliged to produce this example of false harmony, but I am not the author of it, and have done it for my own vindication. It now remains to produce the sentence given against me, which I shall here do, truly copied from the original, subscribed by the judges, and attested in form:—

"Sententia.

"Christi nomine invocato, &c. Noi sopradetti Bartholomeo Esogbedo, et Ghisilino Dancharts, per questa nostra diffinitiva sententia et laude in presentia della detta congregatione, et delli sopra detti Don Nicola, et Don Vincentio, presenti intelligenti, audienti, et per la detta sententia instanti. Pronontiamo sententiamo il predetto Don Nicola non haver in voce, ne in scritto provato sopra che sia fondata la sua intentione della sua proposta. Immo per quanto par in voce et in scriptis il detto Don Vincentio ha provato, che lui per uno competente-mente cognosce et intende di qual genere sia la compositione che hoggi communamente i compositori compongono, et si canta ogni di, come ogniuno chiaramente disopra nelle loro informationi potrà vedere. Et per questo ill detto Don Nicola douer essere condannato, come lo condanniamo nella scom-messa fatta fra loro, come disopra. Et cosi noi Bartholomeo et Ghisilino soprascritti ci sotto scriviamo di nostra mano propria. Datum Romæ in Palatia Apostolico, et Capella prædecta, Die vii. Junij. Anno suprascripto Pontificatus s. d. n. d. Julij. PP. iii. Anno secundo et laudamo.

"Pronuntiavi ut supra. Ego Bartholomeus Esogbedo, et de manu propria me subscripsi.

"Pronuntiavi ut supra. Ego Ghisilinus Dancherta, et manu propria me subscripsi.

"Io Don Jacob Martelli faccio fede, come la sententia et le due polize sopra notate sono fidelmente impresse et copiate dalla Copia della medesima sententia de i sopra detti Giudici.

"Io Vincenzo Ferro confirmo quanto di sopra.

"Io Stefano Bettini detti il Fornarino, confirmo quanto di sopra.

"Io Antonio Barrè confirmo quanto di sopra."

It is to be suspected, as well from the publication of the above sentence, as from the observations of Vicentino on his adversary's book, that he is not in earnest when he calls him a good Christian, and professes to forgive him; nor indeed does it appear by his book, which has been consulted for the purpose, that Vincenzio formally retracted the opinion maintained in the paper delivered in to Ghisilino; and though the passages above cited from his treatise do in effect amount to a confession that his former

opinion was erroneous, his publishing that work without taking notice of the injury Vicentino had sustained by the sentence against him, is an evidence of great want of candour.

It seems that the principal design of Vicentino in the publication of his book was to revive the practice of the ancient genera, in order to which he invented an instrument of the harpsichord kind, to which he gave the name of Archicembalo, so constructed and tuned, as to answer to the division of the tetrachord in each of the three genera: such a multiplicity and confusion of chords as attended this invention, introduced a great variety of intervals, to which the ordinary division of the scale by tones and semitones was not commensurate, he was therefore reduced to the necessity of giving to this instrument no fewer than six rows of keys, 'Sei ordini di tasti,' the powers of which he has, though in very obscure terms, explained; and indeed the whole of the fifth and last book of Vicentino's work is a dissertation on this instrument.

CHAP. LXXXIV.

KIRCHER relates that Gio. Battista Doni, who lived many years after Vicentino,* reduced the six Tasti of his predecessor to three, and as it should seem, without essentially interrupting that division of the intervals to which the six Tasti were adapted.† In another place of the Musurgia he says that the most illustrious knight Petrus à Valle, in order to give an example of the metabolic style, procured a triarmonic instrument to be constructed under the direction of Doni.‡ This was Pietro Della Valle,§ the famous Italian traveller, who appears to have been intimate with Doni, for the fourth discourse at the end of the Annotazioni of Doni is dedicated to him; and Della Valle in his book of travels takes occasion to mention Doni in terms of great respect. The triarmonic instrument mentioned by Kircher is described by Doni in the fifth of his discourses at the end of his Annotazioni.

In prosecution of these attempts to restore the ancient genera, a most excellent musician, Galeazzo Sabbatini of Mirandola, made a bold effort, and gave a division of the Abacus or key-board, by means whereof he proposed to exhibit all imaginable harmonies; but it seems that none of these divisions were ever received into practice; they indeed may be said to have given rise to several essays towards a

* This person was secretary to cardinal Barberini, afterwards pope Urban VIII. He wrote a treatise De Præstantia Musices veteris, another De Generi et Modis della Musica, and another, being annotations on the latter. He possessed a considerable degree of musical erudition, but appears to have been a bigot in his opinions. A full account of him and his writings will be given in the course of this work.

† Musurg. tom. I. lib. VI. pag. 459.

‡ Musurg. tom. I. lib. VII. pag. 675.

§ Pietro della Valle was a Roman gentleman of great learning; he spent twelve years in travelling over Turkey, Persia, India, and other parts of the East. He married a young lady of Mesopotamia, named Sitti Maani, who dying shortly after his marriage, he postponed her interment, carrying her remains about with him in his travels many years. At length returning to Rome, he caused her to be buried with great pomp in the church of Araceli, twenty-four cardinals attending the solemnity; and the afflicted husband prepared to pronounce a funeral oration over her body, began to deliver it, but was interrupted by his tears, and could not proceed. The Roman poets of that time celebrated her death with verses, and there is a book entitled Funerale di Sitti Maani della Valle, celebrato in Roma nel 1637, e descritto da Girolamo Rocchi.

new temperament of the great system adapted to the diatonic genus, wherein it has been proposed to reduce the several keys to the greatest possible degree of equality in respect to the component intervals of the diapason. One Nicolaus Ramarinus, in the year 1640, invented a key-board, simple in its division, but changeable by means of registers.* By this invention he effected a division of the tone into nine commas; but neither was this contrivance adopted, for in general the primitive division of the key-board prevailed, and the arrangement of the tones and semitones in the organ and harpsichord, and other instruments of the like kind, is at this day precisely the same as when those instruments were first constructed.

The above-mentioned work of Vicentino is variously spoken of among musicians. Gio. Battista Doni, in his treatise *De Generi e de' Modi della Musica*, cap. I. pretends to point out many absurdities in his division of the tetrachord for the purpose of introducing the ancient genera into modern practice, and treats his invention of the Archicembalo with great contempt. But in his treatise *De Præstantia Musices veteris*, he is still more severe, and gives a character of Vicentino at length in the following speech, which he puts into the mouth of one of the interlocutors in that dialogue:—

'I suppose you have seen in a tract, which Donius has lately sent abroad, what depraved and absurd opinions, and altogether foreign to the truth, one Nicolaus Vicentinus has conceived concerning the nature, property, and use of the genera: he who, as if he had restored the music of the ancients in its principal part, affected that specious, not to say arrogant, title or surname of Archimusicus, and boasting sang that the ancient music had just now lifted up its head above the deep darkness. Do not he and his followers seem to think that the nature and property of the enarmonic genus consists in having the harmonical series, or what is called the perfect system, cut up into the smallest and most minute intervals? from whence arises that false and ridiculous opinion that the common Polyplectra are to be alone called diatonic, and that those which have their black keys divided in a twofold manner are chromatic, while those which are thicker divided, and consist of more frequent intervals, are to be termed enarmonic: they would not have fallen into this error if they had understood the ancient and natural harmonies in the writings of Aristoxenus and others. But if Vicentinus had been somewhat better instructed in the rules of the science, and in the reading of the ancient authors, when he undertook the province of restoring the ancient music, he would not have entered the sacred places of the Muses with unwashed feet, nor defeated that most ample praise he would have deserved for his honest intentions by unprosperous and vain attempts.—I have often wondered at the confidence of Vicentinus, who, although he could not but be sensible that he had but slender, or rather no learning and knowledge of antiquity, nevertheless did not hesitate to undertake so great a work. But I cease to wonder when I reflect on that Greek

'sentence, "Ignorance makes men bold, but learning "timid and slow."'

To say the truth, it does not appear from his book that Vicentino's knowledge of the science was derived from any higher source than the writings of Boetius; and with no better assistance than they could furnish, the restoration of the genera seems to have been a bold and presumptuous undertaking, and yet there have not been wanting musicians of latter times who have persisted in attempting to revive those kinds of music, which the ancients for very good reasons rejected; and there is to be found among the madrigals of Dominico Mazzochi, printed at Rome, one intitled *Planctus Matris Euryali Diatonico-Chromatico-Enarmonico*, that is to say, in all the three genera of the ancients, which is highly applauded by Kircher.

And with respect to Vicentino, so far are the writers on music in general from concurring with Doni in his censure of him, that some of the most considerable among them have been his encomiasts, and have celebrated both him and that invention or temperature of the *Scala maxima* to which his instrument the Archicembalo is adapted.

'The first among the moderns that attempted compositions in the three genera, was Nicolaus Vicentinus, who when he perceived that the division of the tetrachords, according to the three genera by Boetius, could not suit a polyphonus melothesia and our ratio of composition, devised another method, which he treats of at large in an entire book. There were not however some wanting, who being strenuous admirers and defenders of ancient music, cavilled at him wrongfully and undeservedly for having changed the genera, that had been wisely instituted by the ancients, and put in their stead I know not what spurious genera. But those who shall examine more closely into the affair will be obliged to confess that Vicentinus had very good reason for what he did, and that no other chromatic-enarmonic polyphonus melothesia could be made than as he taught.'†

And as touching that division of the octave by Vicentino, which Doni and others are said to have improved, the late Dr. Pepusch is clearly of opinion that it was perfectly agreeable to the doctrines of the ancients; for after remarking that Salinas had accurately determined the enarmonic, and that strictly speaking the fourth contains thirteen dieses, that is to say, each of the tones five, and the semitone major three; he adds that the true division of the octave is into thirty-one equal parts, which gives the celebrated temperature of Huygens, the most perfect of all, and concludes his sentiments on this subject with the following eulogium on Vicentino: 'The first of the moderns who mentioned such a division was Don Vicentino, in his book entitled, *L'Antica Musica ridotta alla moderna Prattica*, printed at Rome, 1655, folio. An instrument had been made according to this notion, which was condemned by Zarlino and Salinas without sufficient reason. But Mr. Huygens having more accurately examined the matter, found it to be the best temperature that

* Musurgia, tom. I. lib. VI. pag. 460, et seq.

† Musurgia, tom. I. lib. VII. pag. 668.

'could be contrived. Though neither this great mathematician, nor Zarlino, Salinas, nor even Don Vincentino, seem to have had a distinct notion of all these thirty-one intervals, nor of their names, nor of their necessity to the perfection of music.*'

HERMAN FINCK, chapel-master to the king of Poland, in 1556, published in quarto a book with this title '*Practica musica Hermanni Finckii, exempli variorum signorum, proportionum et canonum, judicium de tonis, ac quædam de arte suaviter et artificiose cantandi continens*;' a good musical institute, but in no respect better than many others that were published in Germany after the commencement of the sixteenth century. The author, though a chapel-master, seems to have been a protestant, for in the beginning of his work he mentions Luther of pious memory, and confirms the accounts of him that say he loved and understood music.

AMBROSIUS WILPHLINGSEDERUS in 1563, published at Norimberg, *Erotemata Musices Practicæ*, a curious book, and abounding with a great variety of compositions of the most excellent masters; and in the same year

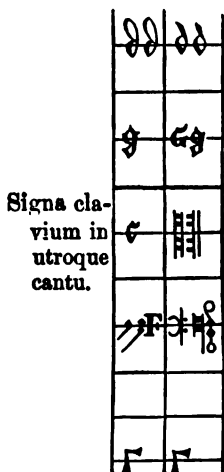
LUCAS LOSSIUS, of Lunenburg, published a book with this title, '*Erotemata Musicæ ex probatissimis quibus que hujus dulcissima artis scriptoribus accurate et breviter selecta et exemplis puerili institutioni accomodis illustrata jam primum ad usum scholæ Lunenburgensis et aliarum puerilium in lucem edita*, a Luca Lossio. Item melodiarum sex generum carminum usitatorum in primis suaves in gratiam puerorum selectæ et editæ Noribergæ, 'M.D.LXIII.' and again in 1570, with additions by Christopher Prætorius, a Silesian and chanter of the church of St. John at Lunenburg. The title of this book of Lossius does in a great measure bespeak its contents: Lossius was a Lutheran divine, born at Vacha in Hessa in the year 1508, and for above fifty years rector of the college or public school at Lunenburg, a celebrated instructor of youth, and very well skilled in music. He died anno 1582. Two years before his death, which happened anno 1582, he composed the following epitaph on himself:—

Hac placide Lucas requiescit Lossius urna.
Parte cinis terræ, qua levis ille fuit.
Pars melior vivens cæli mens incolit arcem,
Inter, qui multos erudiere, viros.
Qui publi decies quinos atque amplius annos
Tradidit hic artes cum pietate bonas.
Edidit et facili qui simplicitate libellos
Non paucos, Christi, Pieridumque scholis.
Finibus Hassiacis nemorosus natus, et agris,
Vacham qua præter, clare Visurge, fluit.
Hæc ubi cognoris, quo te via ducit euntem,
Lector abi, et felix vive, valeque diu.

It was this Lossius that published the Lutheran *Psalmodia*, mentioned in a preceding page. It seems by the numerous publications about this time of little tracts, with such titles as these, *Erotemata Musicæ*, *Musicæ Isagoge*, *Compendium Musicæ*, that the protestants were desirous of emulating the Roman

catholics in their musical service, and that to that end these books were written and circulated throughout Germany. They were in general printed in a small portable size, and a book of this sort is to be considered as a kind of musical accident: that of Wilphlingsederus, as also this of Lossius, are excellent in their way; the merit of them consists in their brevity and perspicuity, and surely a better method of institution cannot be conceived of than this, whereby a child is taught a learned language, and the rudiments of a liberal science, at the same time.

These, and other books of the like kind, calculated for the instruction of children in *Cantu choralis* et in *Cantu figurati vel mensurali*, i. e. in plain-song and in figurate or mensural music, are for the most part in dialogue, in which the responses, according as required, are spoken in words or sung in notes. They all contain a division or title *De Clavibus signatis*, with a type of the cliffs as they are now called. Rhaw gives it in this form:—



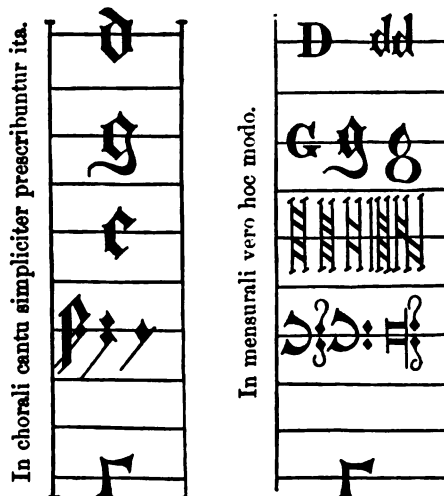
Et ponuntur omnes in lineali situ, quædam tamen sunt magis familiares, utpote F et C. g. rariuscule. I vero et d d rarisime utimur. Unde

Lineæ signatas sustentat scilicet omnes.

Et distant inter se mutuo per diapentem.

F tamen γάμμα distinguat septima quamvis.

And Wilphlingsederus thus:—



* Letter from John Christoph. Pepusch, Mus. D. to Mr. Abraham de Moivre, published in the Philosophical Transactions for the months of Oct. Nov. and Dec. 1746, page 266 et seq.

The Typus Clavium Signatarum of Lucas Lossius is in this form :—



Lampadius, an author of the same class with those above-cited, and whose *Compendium Musices* is mentioned in a preceding page, gives the following character *g* as the signature for *G SOL RE UT* in the series of supracutes; this is worthy of observation, for his *Compendium* was published in 1537, and it is the character in use at this day.

By the above types it appears that anciently five keys, or cliffs, as they are called, were made use of, whereas three are now found sufficient for all purposes. It may be said perhaps that *F* and *dd* were at no time necessary; but it seems that in order to imprint the place of the cliffs upon the memory of children, it was necessary in some way or other to tell them that the station of *F* was a seventh above *F*, and that the other cliffs were a diapente distant from each other; this Lossius does in the following verses :—

Linea signatas claves complectitur omnes
Mutuo distantes inter se per diapentem,
F licet ab *gamma* distinguat septima tantum.

And Rhaw in these words :—

Linea signatas sustentat scilicet omnes,
Et distant inter se mutuo per diapentem.
F tamen ab *gamma* distinguat septima quamvis.

It therefore became necessary to give *F* as the terminus à quo for *F*, and though the power of *dd* was sufficiently ascertained by the cliff *g*, it is to be observed that the signature *dd* answered to the rule above-cited, and preserved the appearance of regularity; for by this disposition of the cliff, *C* occupied the middle of the scale, and as there were two cliffs below, so were there two above it. Rhaw observes that the most usual are *F*, *C*, and *g*, and that *F* and *dd* are very rarely used; he adds, that it was anciently a practice to make the line for *F* of a red, and that for *C* of a yellow colour, and that instances thereof were in his time to be seen in ancient music books: this is a confirmation of a passage in the *Micrologus* of Guido to the same purpose.

All these writers distinguish between the cliffs proper to plain-song, and those used in figurate or mensural music, which it was thought necessary to do here, for unless this be thoroughly understood, very little of the music of these and the preceding times can be perused with any degree of satisfaction.

They also severally exhibit a Cantilena or actual praxis of the intervals by the voice, in order to impress them on the minds of children. The most ancient example of this kind known to be extant is a Cantilena for the practice of learners, inserted in a subsequent part of this work, said to have been framed by Guido himself; but for this assertion there seems to be no better authority than tradition, for it is not to be found in any of his writings. Those contained in the *Enchiridion* of George Rhaw, and the *Compendium Musices* of Lampadius, differ but very little from that of Guido above-mentioned.

CLAUDIUS SEBASTIANUS published at Strasburg in 1568 a book intitled *Bellum Musicale*, inter *Plani et Mensuralis Cantus Reges*. A whimsical allegory, but a learned book.

GIOSEFFO ZARLINO, of Chioggia,* a most celebrated theorist and practical musician, was born in the year 1540; from the greatness of his erudition there is reason to imagine that he was intended for some learned profession; this at least is certain, that it was by the recommendation of Adrian Willaert that he betook himself to the study of music, and Salinas asserts that he was a disciple of Willaert. Bayle styles him president and director of the chapel of the Signory of Venice, but the true designation of the office is maestro di capella of the church or temple of St. Mark. He composed the music for the rejoicings at Venice upon the defeat of the Turks at Lepanto, which was much applauded; notwithstanding which the world has chosen to consider him as a theorist rather than a practical composer, and in this they seem to have judged properly, for in the science of music he is indisputably one of the best writers of the modern times. He died at Venice in February 1599, as Thuanus relates, who has celebrated him among the learned men of that time.

In the catalogue of the library of Thuanus, mention is made of two books of Zarlino, the one intitled *Dimostrazioni Harmoniche*, printed at Venice in the year 1571, and afterwards with additions in 1573; and the other printed in the same city in the year 1588, and intitled *Sopplimenti Musicali*; but the best edition of these and his other works is unquestionably that of 1589, in folio, printed at Venice with this title, *Tutti l' Opere del R. M. Gioseffo Zarlino Da Chioggia*. These consist of four volumes, the first is intitled *Istitutioni Harmoniche*, the second *Dimostrazioni Harmoniche in cinque Ragionamenti*, the third *Sopplimenti Musicali*; the fourth volume is a collection of tracts on different subjects, which have no relation to music.

In the three first volumes of these his works, Zarlino, in a style, in the opinion of some very good judges of Italian literature, not inelegant, has entered into a large discourse on the theory and practice of music, and considered it under all the various forms in which it appears in the writings of the Greek harmonicians, and the writers of later times: as he appears to have been acquainted with the Greek language, there is little doubt but that he derived his intelligence from the genuine source; and as to

* An episcopal city in one of the isles of the gulph of Venice, in Latin Clodia, whence comes the Latin surname of Clodiensis given to Zarlino.

Boetius and the other Latin and Italian writers, he seems to be possessed of all the knowledge that their writings were capable of communicating.

As the substance of what is contained in the ancient writers has already been given in the course of this history, it is unnecessary to incumber it with a minute abridgment of so copious a work as that of Zarlino; and a general account of the contents of the *Istituzioni*, the *Dimostrazioni*, and the *Sopplimenti*, with occasional remarks and observations on the several particulars contained in them, will suffice to shew the nature and tendency of Zarlino's writings, and exhibit a general view of the merit and abilities of their author.

The *Istituzioni* begins with a general eulogium on music, setting forth its excellence and use as applicable to civil and religious purposes; in his division of music into mundane and humane, Zarlino follows Boetius and other Latin writers. Of the number Six, he says that it comprehends many things of nature and art; and in a far more rational way than Bongus has done, he considers its properties so far only as they relate to music.

In his explanation of the several kinds of proportion of greater and lesser inequality, and of the difference between proportion and proportionality, he is very particular, and very learnedly and judiciously comments upon Boetius, who on this head is rather too concise.

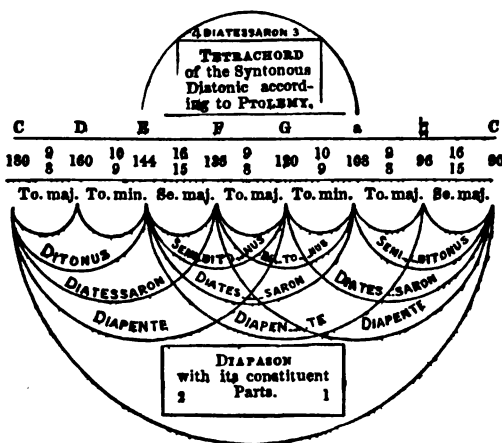
The account of the ancient system given by him cannot be supposed to contain any new discoveries, all that can be said about it is to be found in the writings of the Greek harmonicians, and with these he seems to have been very well acquainted.

In his description of that species of the diatonic genus called the Syntonous, or intense of Ptolemy, in which the tetrachord is divided into tone major, tone minor, and a greater hemitone in the ratio of 16 to 15, he gives it the epithet of Natural, an expression which seems to bespeak that predilection in its favour, which he manifested in a formal dispute with Vincentio Galilei on the subject, in which he contended for its superior excellence in comparison with every other of the diatonic species, and succeeded.

Chap. xxv. of the second part of the *Istituzioni* is an explanation of an instrument called the Mesolabe, said to have been invented either by Archytas of Tarentum, or Eratosthenes, the use whereof is to distinguish, by means of mean proportionals, between the rational and irrational intervals, and to demonstrate the impossibility of an equal division of the superparticular ratios. This instrument was it seems a great favourite with Zarlino, for in the *Sopplimenti*, lib. IV. cap. 9. he enlarges on the utility of it, and complains of his disciples that they could not be prevailed on to study it with that degree of attention which it merited.

Chap. xxxix. contains a figure of the diapason, with a representation of the diatonic tetrachord, constituted of a greater semitone, in the ratio $\frac{1}{3}$ of a tone major $\frac{2}{3}$, and tone minor $\frac{1}{2}$; this is the division which Zarlino throughout his works contends for as the natural and only true one, and is called the

syntonous or intense diatonic of Ptolemy. The figure above-mentioned is thus delineated by Zarlino:—



Chap. xlix. contains the author's sentiments of the ancient genera and their species, upon which he does not scruple to pronounce that the ancient division of them is vain and unprofitable.

The third part of the *Istituzioni* contains the elements of counterpoint, and directs how the several parts of a Cantilena are to be disposed. It contains also the precepts for the composition of fugue, whereon discoursing, the author makes frequent mention of Jusquin, Brumel, and other excellent composers; and celebrates, in terms of the highest respect, the excellencies of Adrian Willaert his master.

The fourth and last part of the *Istituzioni* treats of the modes or tones, that is to say, those of the ancients, and those other instituted by St. Ambrose and pope Gregory, and adapted to the service of the church. Zarlino's account of the former contains a great deal of that history which is justly suspected to be fabulous, as namely, that the Phrygian was invented by Maryas; the Mixolydian by Sappho of Lesbos, the poetess; and the others by persons of whom scarce any memorials are extant. In this part of his work Zarlino very clearly explains the difference between the harmonical and arithmetical division of the diapason, from whence the two kinds of mode, the authentic and the plagal, are known to arise; but here with Glareanus he contends, notwithstanding the opinion of many others to the contrary, that the modes are necessarily twelve; he does not indeed profess to follow Glareanus in his division, but whether he has so done or not is a matter in which the science of music is at this time so little interested, that it scarce deserves the pains of an enquiry.

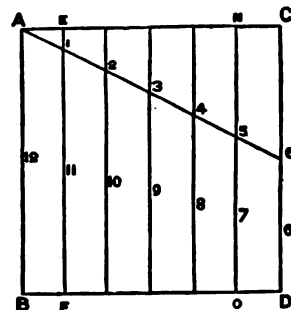
Chap. xxxii. of this last part contains some rules for accommodating the harmony of a cantilena to the words which are the subject of it. Rules indeed, if any can be prescribed for accommodating melody to words, might be of use, but between the harmony of sounds and the sentiments of poetry there seems to be no necessary relation.

The *Dimostrazioni Harmoniche* are a series of discourses in dialogues, divided into five *Ragionamenti*.

The author relates that in the year 1562, his friend Adrian Willaert being then afflicted with the gout, he made him a visit, and found at his house Francesco Viola, chapel-master to Alfonso d'Este, duke of Ferrara, and Claudio Merulo, whom he styles a most sweet organist;* they begin a discourse on the subject of music, in which each delivers his sentiments with great freedom.

The subjects treated on in the first of the Ragionamenti are the proportions of greater and lesser inequality, and the measure of intervals. The whole of this dialogue may be said to be a commentary on Boetius; the thirty-ninth and last proposition contains a demonstration that six sesquioctave tones exceed the diapason.

The second and third of the Ragionamenti consist for the most part of demonstrations of the ratios of the consonances and the lesser intervals. In the second, Prop. xiv. is a diagram, an improvement on the Helicon of Ptolemy, whereby the ratios of the consonances are clearly demonstrated.



This parallelogram is divided into six parts by lines, which are bisected by a diagonal line proceeding from a point that divides the side C D equally, to the opposite angle. The side of the parallelogram A B is supposed to contain twelve parts; the bisection of the line C D is equal, that is to say it gives six parts on each side, but the bisection of the other lines is such, as gives the following harmonical proportions, amounting in number to no fewer than forty-five, as appears by this table :—

12	10 Semiditone	8	6 Diatessaron
	9 Diatessaron		5 Hexachord minor
	8 Diapente		4 Diapason
	6 Diapason	8	3 Diapason and diatessaron
	5 Diap. & semiditone		2 Disdiapason
	4 Diapason & diapente		1 Triadiapason
	3 Disdiapason		
	2 Disdiap. & diapente		
	1 Triadiap. & diapente		
10	9 Tone minor	6	5 Semiditone
	8 Ditone		4 Diapente
	6 Hexachord major		3 Diapason
	5 Diapason		2 Diapason & diapente
	4 Diapason and ditone		1 Disdiapason & semiditone
	3 Diapason and Hexachord major		
	2 Disdiapason & ditone	5	4 Ditone
	1 Triadiap. and ditone		3 Hexachord major
			2 Diapason and ditone
			1 Disdiapason & ditone
9	8 Tone major	4	3 Diatessaron
	6 Diapente		2 Diapason
	5 Heptachord minor		1 Disdiapason
	4 Diapason & tone maj.		
	3 Diapason & diapente	3	2 Diapente
	2 Disdiapason and tone major		1 Diapason and diapente
	1 Triadiapason and tone major		2 1 Diapason

* CLAUDIO MERULO, or MERULA, of Correggio, was organist to the duke of Parma. He composed masses, psalms, and motets, and published *Toccata d'Intavolatura d'Organo*. In Rome, appresso Simone Vesovio, 1566, fol.

The divisions of the lines e f and n o, which give the proportions of 11 to 1, and 7 to 5, are irrational, and are therefore omitted in the table.

The fourth of the Ragionamenti directs the division of the monochord, and treats in general terms of the ancient system.

The fifth and last contains the sentiments of the author on the modes of the ancients, in which little is advanced that is not to be found elsewhere.

The Sopplimenti Musicali is dedicated to Pope Sixtus V.; the author styles it 'A declaration of the principal things contained in the two former volumes, and a formal defence of the author against the calumnies of his enemies.' The ground of the dispute between Zarlino and his adversaries was principally this, Zarlino through the whole of the two former volumes, in his discrimination of the five several species of the diatonic genus, rejects the ditonic diatonic of Ptolemy $\frac{3}{2} \frac{4}{3} \frac{5}{4} \frac{6}{5} \frac{7}{4} \frac{8}{5}$, which indeed seems to be no other than the diatonic of Pythagoras himself, and prefers to it the intense or syntonous diatonic of Ptolemy, as it is called, $\frac{1}{2} \frac{3}{4} \frac{5}{6} \frac{7}{8} \frac{9}{10} \frac{11}{12}$, as being the most natural to the ear. This is in truth the Diatonic of Didymus, for it was he that first distinguished between the greater and lesser tone, with this difference, that he places them in this order $\frac{1}{2} \frac{3}{4} \frac{5}{6} \frac{7}{8}$, thereby giving to the lesser tone the first place in the tetrachord, whereas Ptolemy gives it the second; and in thus preferring the syntonous to the ditonic, Zarlino, as Dr. Wallis observes, was followed by Kepler, Mersennus, Des Cartes, and others.†

This, the Lutenists, who, as they were for the most part Aristoxeneans in practice, had adopted another tuning, opposed. They contended for a tetrachord of two equal tones and a semitone, but yet refused to abide a determination of the question by any other judgment than that of the ear.

At the head of these opponents of Zarlino stood Vincentio Galilei, a man of great learning and ingenuity, and who, though not a musician by profession, was deeply skilled in the science. He was besides a most exquisite performer on the lute, and a favourer of that division of Aristoxenus which is called the intense, and gave to the tetrachord a hemitone and two whole tones. This person, who had formerly been a disciple of Zarlino, published as it seems a short examen of the Istituzioni upon its first publication, intitled 'Discorso intorno all' Opere del Zarlino,' which he criticises with an unwarrantable degree of severity; but in a subsequent work, intitled 'Dialogo della musica antica et della moderna,' he takes great pains to prove that the preference which Zarlino had given to the syntonous species of the diatonic above-mentioned, had no foundation in nature. The conduct of Galilei in this dispute is worthy of remark. He considers Zarlino as an innovator or corrupter of

† Dr. Wallis makes it a question whether or no Zarlino was the first that endeavoured to introduce the syntonous diatonic instead of the ditonic diatonic, but Galilei, in his Dialogue, pag. 112, expressly asserts that Lodovico Fogliano of Modena, and who published in 1539 a folio volume intitled *Musica Theorica*, of which an account has herein before been given, was the first who discovered that the diatonic of his time was not the ditonic, but the syntonous or intense diatonic. This, Zarlino, in the Sopplimenti, lib. III. cap. II. seems to deny; but the truth of the matter is, that Fogliano, in the second section of his book, treats expressly 'De utilitate toni majoris et minoris,' which he would hardly have done, but with a view to establish that division of the tetrachord which Zarlino afterwards contended for.

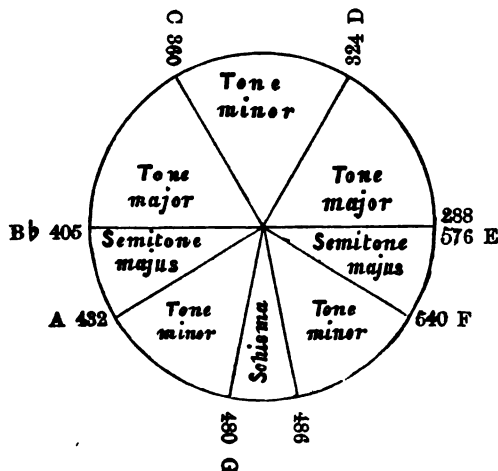
music, and while he is treating him as such, he endeavours to make it believed, that he was the first among the moderns that attempted to introduce that species of the diatonic which admitted of dissimilar tones, but fearing lest instead of a corrupter he might in the opinion of some be deemed an improver of musical practice, he takes care to inform the world, and indeed expressly asserts, that Lodovico Fogliano, many years before Zarlino, found out and maintained that the diatonic even of that day was not the diatonic, but the syntonous diatonic of Ptolemy.

The *Sopplimenti Musicali* of Zarlino, lib. III. cap. 2, contains a defence of the author against this invidious charge of Galilei, whom he ironically styles his loving disciple, 'il mio discepolo amorevole.' As to the merits of the question between them, they seem to be determined in favour of Zarlino, for not only have Kepler, Mersennus, and Des Cartes adopted the division which he contended for,* but it is the only one practised at this day.

* As this assertion does at present stand on no better ground than a bare dictum of Dr. Wallis, in the appendix to his edition of Ptolemy, it may here be expected that in support of it the opinions of the authors above named should severally be adduced. To begin with Kepler. This author, who in his reasoning about music, affects a language peculiar to himself, after giving the preference to the division of the tetrachord $\frac{2}{3} \frac{1}{2} \frac{1}{3}$, speaks of two kinds of musical progression, the hard and the soft, which others characterize by the terms major and minor third. In the former of these, proceeding from the syllable *ur*, which is the progression referred to by all who speak of the disposition of the greater and lesser tone, he says that in the division of the tetrachord, nature herself informs us that the greater tone has the lower place, whereby he expresses his acquiescence in the opinion of Zarlino and his adherents upon the question in debate. *Harmonices Mundi*, lib. III. cap. vii.

As to Mersennus, who appears to have reviewed the controversy with great attention, he says that nature pays no regard to the convenience of it, and that though the division of Aristoxenus may for particular reasons be preferred by those who play on the lute, it does by no means follow that it is upon the whole the most eligible; for, adds he, 'of all systems possible, that is the most natural and easy to sing, which follows the harmonical numbers, as is experienced when good voices sing several parts together, who could not do all that is marked in simple or diminished counterpoint commonly made use of, unless they observed the distinction of the greater and lesser tone, and that of the greater mean, and lesser semitones, and of several others elsewhere spoken of by him.' *Harm. Univers. Des Instruments*, liv. II. pag. 61. And in another place, 'that system which consists of a greater and lesser tone, and also of different semitones, and other just intervals both consonant and dissonant, is the best of all; and that this is the very nature of the song, the ear, the imagination, the instruments, and the understanding all confirm, provided experiments are made use of for an accurate enquiry into it.' *Mers. Harmonic. lib. V. De Dissonantia*, pag. 86.

The sentiments of Des Cartes on the question which of all others is the most eligible division of the diapason, are deducible from the chapter in his *Compendium Musicae*, intitled *De Gradibus sive Tonis musicis*, wherein he asserts that the order to be observed in constituting the intervals contained in the diapason ought to be such, as that a semitone major shall have on each side next to it, a tone major and a tone minor. This disposition he illustrates by the following figure:—



The *Sopplimenti* is of a miscellaneous nature, for it is a defence of many opinions advanced by the author in his former works. It contains also many particulars, many diagrams and mathematical problems, calculated to explain and illustrate his doctrines. In the fourth book he treats of the Genera and their species or colours, as they are called, and proposes a temperament adapted to the lute, whereby the diapason is divided by semitones into twelve equal parts. In the sixth book he treats of the ancient modes, which with Glareanus he makes to be twelve in number. In the eighth and last book he speaks of the organ, and describes one in the ancient city of Grado, the figure whereof is given in a preceding page of this work.

Many very curious particulars and little anecdotes of persons and things relating to music are interspersed in these three volumes of Zarlino's works, viz., the *Istitutioni*, *Dimostrazioni*, and *Sopplimenti*, some of the most remarkable are these. Deer are delighted with the sound of music, and huntsmen by means thereof easily take them. *Istit. II. pag. 11.*†

Upon which it may be observed that A is assumed for the chord A, and the other letters for the corresponding chords in the scale. Between A and B ♭ the ratio is $\frac{1}{2} \frac{3}{4}$, which in smaller numbers is $\frac{1}{2} \frac{3}{4}$, and between E and F $\frac{5}{8} \frac{7}{8}$, also $\frac{1}{2} \frac{3}{4}$, both of which are semitones major, $\frac{1}{2} \frac{3}{4}$ is $\frac{2}{3}$, and $\frac{3}{4} \frac{5}{8}$ is $\frac{1}{2}$, thus are produced the intervals contended for, $\frac{1}{2} \frac{3}{4} \frac{1}{2} \frac{3}{4}$, which in the opinion of Zarlino and others constitute the syntonous or intense diatonic tetrachord of Ptolemy, and in that of Des Cartes is the most eligible division or temperament of that interval, and consequently of the diapason.

There is little doubt but that that division of the tetrachord which constitutes the syntonous or intense species of the diatonic genus is in theory the most eligible, and as far as regards vocal music, it may be equally well adapted to practice. But it seems that in such instruments as the organ, and others where the measure of intervals does not depend upon the performer, such a division of the tetrachord as distinguishes between the greater and lesser tone is not admissible. Nay, were the concords themselves in such instruments to be uniformly tuned to the degree of perfection required by a nice ear, some of the consonant intervals would be so constituted as to approach very nearly to discord.

For this reason it is said that Zarlino could never prevail in his endeavours to establish a tuning of the organ correspondent to the division of the tetrachord in the syntonous diatonic; for Bontempi attests, that not only no organ in Italy or Europe was altered, or the tuning thereof in any degree varied, in consequence of his speculations, but that that of the chapel of St. Mark, where he presided, continued exactly in the state it had been left in by Claudio Monteverde, Giovanni Rovetta, and others his predecessors. *Historia Musica di Bontempi, Parte prima, Corollario IV.*

The difficulties arising from that surd quantity which in a course of numerical calculation arises in the division of the diapason, was but little noticed in vocal performance, for this reason, that the voice in singing accommodates itself to the ear, and with wonderful facility constitutes only grateful intervals, insensibly rejecting such as are dissonant. But in such instruments as the organ this quantity was for a long time found to be an unmanageable thing; a series of fifths all perfect through the scale was what the ear would not bear, and this consideration suggested the invention of what is called a Temperament, by which is to be understood a tuning, wherein by making the intervals irrational, more, in respect of harmony and coincidence of sound, is given to the dissonances than is taken from the consonances: the first essay of this kind is said by Polydore Virgil, *De Rerum Inventoribus*, lib. III. cap. xviii. to have been the invention of some very learned man in the science of music, but whose name, country, and even the age he lived in, are irrecoverably lost; it consisted in the intension of the diatessaron, and the remission of the diapente, and by necessary consequence made both the tones equal. Bontempi, 186. Salinas, lib. III. cap. xiii. has remarked upon this division that the equality of the tones implies the taking away of the comma; and in another place, that by this division the redundant commas in the diapason, which he makes to be three, are distributed throughout the diapason system. And this temperament is preserved by those tuners of the organ who make it a rule, and it is almost an universal one, to tune the thirds as sharp, and the fifths as flat, as the ear will bear them.

The reduction of the tones to an equality rendered each of them capable of a division into semitones, and gave rise to the invention of that called by the Italians *Systema Participato*, in which the diapason is divided into twelve semitones, whereby, in the opinion of some, the diatonic and chromatic genera are united, as indeed will seem to be the case upon a bare view of the keys of an organ or harpsichord.

† The author asserts this fact on the authority of Ælian, a writer of no great credit; nevertheless that these animals are susceptible of the power

—The human pulse is the measure of the beats in music. Ibid. 256.—Country people, and those that understand not music, naturally sing the diatonic

of music is not to be disputed. Plutarch, in the seventh book of his *Symposiacs*, says of deer and horses, that they are of all irrational creatures the most affected with harmony. Playford, in the preface to his *Introduction to Music*, says the same thing, and adds, 'Myself, as I travelled some years since near Royston, met a herd of stags, about 20, upon the road, following a bagpipe and violin, which when the music played they went forward, when it ceased they all stood still, and in this manner they were brought out of Yorkshire to Hampton Court.' And whoever will make the experiment, will find it in his power to draw to him and detain one of these creatures as long as he pleases by the sound of a violin or any instrument of that kind. Horses are also delighted with the sound of music.

'For do but note a wild and wanton herd,
'Or race of youthful and unhandled colts,
'Fetching mad bounds, bellowing and neighing loud,
'(Which is the hot condition of their blood)
'If they but hear perchance a trumpet sound,
'Or any air of music touch their ears;
'You shall perceive them make a mutual stand;
'Their savage eyes turn'd to a modest gaze
'By the sweet power of music.'

SHAKESPEARE'S *Merchant of Venice*, Act V. Scene I.

For this fact we have also the authority of the duke of Newcastle, who asserts it in his book of *Horsemanship*. Henry Stephens also relates that he once saw a lion at London, which would forsake his food to hear music. Pref. ad Herod.

Elephants are likewise said to be extremely susceptible of the power of music. Suetonius relates that the emperor Domitian had a troop of elephants disciplined to dance to the sound of music, and that one of them, who had been beaten for not having his lesson perfect, was discovered the night after in a meadow, practising it by himself. In the *Mélanges* of Vigneul Marville, tom. III. is a humorous relation of the effects of music on a number of animals of different kinds, wherein it is said that a horse, a hind, a dog, and some little birds were very much affected by it, but that an ass, a cow, a cat, and a cock and hen were all insensible of its charms.

In the *Histoire de la Musique, et de ses Effets*, tom. I. pag. 321, is the following curious relation to this purpose:—

'Monsieur de —, captain of the regiment of Navarre, was confined six months in prison for having spoken too freely to Monsieur de Louvois, he begged leave of the Governor to grant him permission to send for his lute to soften his confinement. He was greatly astonished after four days to see at the time of his playing the mice come out of their holes, and the spiders descend from their webs, who came and formed a circle round him to hear him with attention. This at first so much surprised him, that he stood still without motion, when having ceased to play, all those insects retired quietly into their lodgings: such an assembly made the officer fall into reflections upon what the ancients have told us of Orpheus, Arion, and Amphion. He assured me that he remained six days without playing, having with difficulty recovered from his astonishment, not to mention a natural aversion he had for these sorts of insects, nevertheless he began afresh to give a concert to these animals, who seemed to come every day in greater numbers, as if they had invited others, so that in process of time he found a hundred of them about him. In order to rid himself of them, he desired one of the jailors to give him a cat, which he shut up sometimes in a cage when he chose to have this company, and let her loose when he had a mind to dismiss them, making it thus a kind of comedy that alleviated his imprisonment. I long doubted the truth of this story, but it was confirmed to me six months ago by M. P——, intendant of the duchess of V——, a man of merit and probity, who played upon several instruments to the utmost excellence. He told me that being at —, he went up into his chamber to refresh himself after a walk, and took up a violin to amuse himself till supper-time, setting a light upon the table before him; he had not played a quarter of an hour before he saw several spiders descend from the ceiling, who came and ranged themselves round about the table to hear him play, at which he was greatly surprised, but this did not interrupt him, being willing to see the end of so singular an occurrence. They remained upon the table very attentively until somebody came to tell him supper was ready, when having ceased to play, he told me these insects remounted to their webs, to which he would suffer no injury to be done. It was a diversion with which he often entertained himself out of curiosity.'

The same author says that he once saw, at the fair of St. Germain, rats dance in cadence upon a rope to the sound of instruments, standing upright, each holding a little counterpoise, in the manner of rope-dancers. He says he also saw eight rats dance a figure-dance as truly as so many professed dancers; and that a white rat from Lapland danced a saraband justly, and with all the gravity of a Spaniard.

Plutarch relates that a certain barber, who kept a shop in the Greek forum, had a magpie that imitated the sound of musical instruments, the cry of oxen, and could pronounce the words of men; and that a certain rich man passing by, with trumpeters in his train, who, as was usual, stopped there and played for some time, the bird from that day became mute, to the wonder of every one. Many reasons were given for his silence, but the true one was he was meditating to imitate the sound of the trumpets, for first he was observed to practise silently and to himself the tune they had played, at last he broke out, and sang it so truly and melodiously, that all were astonished who heard him.

Cælius Rhodiginus relates that he saw at Rome a parrot which Cardinal Ascanius had purchased for a hundred pieces of gold, that pronounced and clearly articulated, without hesitation or interruption, the words of the Apostle's Creed.

And lastly, Kircher relates, that when Basilus the emperor of the

octave with a third and sixth major. Ibid. 262.—Domenico da Pesaro, an excellent fabricator of harpsichords, and other instrumenti da penna. Ibid. 171.—Boccace invented the Rima Ottava. Ibid. 381.—Jusquin considered the fourth as a consonance, and used it in two parts without any accompaniment. Ibid. 187.—Vincenzo Colombi, and Vincenzo Colonna of Italy, two organ-makers, inferior to none in the world. Ibid. 374.—Michael Stifelius, an excellent mathematician,* and Nicolo Tartaglia of Brescia,† attempted an equal division of the tone, but without success. Dimost. 146.—Adrian Willaert persuaded Zarlino to the study of music. Ibid. 12.—The Chromatists of Zarlino's time were in his opinion the enemies of good music. Ibid. 215.—Vincenzo Colombi, the famous organ-maker, made the author a monochord, diatonically divided, by semitone major, tone major, and tone minor. Ibid. 198.—Bede, who wrote on music, makes use of the terms *Concentus* and *Discantus*, from whence it is to be inferred that music in parts was known in his time. Soppli. 17.—Gioseffi Guarni of Lucca, an excellent organist and composer. Ibid. 18.

The fourth and last volume of Zarlino's work is on miscellaneous subjects. It contains a treatise on *Patience*, a discourse on the origin of the Capuchin Friars, and an answer to some doubts that had arisen touching the correction of the Julian calendar.

From the foregoing account of the works of Zarlino it sufficiently appears that they are a fund of musical erudition; and the estimation in which they are held by men of the greatest learning and skill in the science, may be judged of from the following character which John Albert Bannius has given of him and his writings. 'Joseph Zarlino of Chioggia was a great master of the theory of music. In his learned Institutions, Demonstrations, and Supplements published in Italian at Venice, 1580, he has explained and improved the science with much greater success than any other author. He is somewhat prolix, but his learning amply compensates for that fault. John Maria Artusius Bononiensis reduced the precepts of Zarlino into a Compendium, and this again into tables. In these he sets forth the science of music in a short, clear, and perspicuous manner. There are others who have written on music, whether they equal Zarlino or not I do not know, at least they do not surpass him.—So that

East, at the persuasion of Santabarneas, had thrown his son Leo into prison on suspicion of his having conspired against him; the household lamented the fate of Leo, and sang mournful verses, these a parrot learned; and Basilus when he heard the parrot repeat them, and in a melancholy tone pronounce the name of Leo, was so affected that he released him, that it might not be said he was overcome by a parrot in tenderness for his son.

* Michael Stifelius was a German Lutheran minister, a man of learning, and particularly skilled in the science of arithmetic, by the help whereof he undertook to predict that at ten in the morning of the third day of October, 1533, the world would be at an end; early in the morning of that day Stifelius ascended the pulpit, and exhorted his hearers to make themselves ready, for that the minute was at hand in which they were to ascend to heaven with the very clothes that they had then on; the hour passed, and the people finding themselves deceived, fell on their pastor, and had he not escaped, would probably have killed him; however, by the interest of Luther, he got reinstated in his church. Thuanus and other historians relate this fact with all its circumstances, and Camerarius in his *Historical Meditations* has made a very comical story of it: the whole may be seen in Bayle, who has an article for Stifelius.

† Nicolo Tartaglia was an excellent mathematician; he translated Euclid into the Italian language, and wrote a treatise *Di Numeri et Misura*. Apostolo Zeno styles him 'Un dotto Bresciano.'

'Zarlino alone will serve instead of all the rest : without him the opinions of the ancients cannot be understood, nor a perfect knowledge of this science be easily attained.* But he does not come up to the perfection of the modern music. I have commended Zarlino above all the rest, not because the writings of other men on this subject are of no value, for they contain many excellent and learned instructions, but because he is the best writer on this subject, and as many authors having given but an imperfect account of music, and this defect must be supplied by great study, industry, and various reading, I cannot recommend any one of them to those who study this art except Zarlino. Besides, few of them have at the same time thoroughly examined and understood both the theoretical and practical part of music. Zarlino in my opinion has written on this subject with more learning and success than all the rest : and he is almost the only author who has succeeded in it. His *Compendium*, as it is drawn up by John Maria Artusius Bononiensis, is an excellent method, and may be of singular use in the practice of musical composition.†

Artusi is by this account of Bannius so connected with Zarlino, that it becomes necessary to speak in this place of him rather than of Vincentio Galilei, the great opponent of the latter. The *Compendium* above-mentioned was published at Venice in 1586, and therefore must have been taken either from the first or second edition of the *Istitutioni*. It is entitled '*L'Arte del Contraponto ridotta in tavole, dove brevemente si contiene i precetti à quest' arte necessari.*' The author professes to follow the moderns, and particularly Zarlino, from whose work above-mentioned he has extracted a variety of excellent rules. These are disposed in analytical order, and are selected with such care and judgment, that this *Compendium*, small as it is, for it makes but a very thin folio, may be said to be one of the books of the greatest use to a practical composer of any now extant.

In 1589 Artusi published a second part of *L'Arte del Contraponto*, intended, as the title-page declares, to explain the nature and use of the dissonances ; a curious and valuable supplement to the former.

Artusi was an ecclesiastic, and a canon regular in the congregation Del Salvatore at Bologna : a considerable time after the publication of his book entitled *L'Arte del Contraponto*, he published a treatise

* Notwithstanding this encomium on Zarlino, which at least implies that he was well skilled in the ancients, there have not been wanting those who have asserted that he never read them. Bontempi, speaking of the modern system, in which most of the intervals are irrational, uses these words, 'Egli non è né il Sintono antico, né il Sintono reformato da Tolomeo, come infellicemente sostiene il Zarlino, il quale, senza Greca letteratura, ovvero senza haver letto ovvero considerato la dottrina de' Greci, dà l'essere ad un' altro sintono a modo suo, non costituito da padri della scientia.' *Hist. Music.* pag. 188.

There can be little doubt but that Zarlino was acquainted with the Greek language, seeing that his writings abound with quotations from the Greek authors ; but whether he had ever seen the *Manual of Nicomachus*, the *Elements of Aristoxenus*, the three books of *Aristides Quintilianus De Musica*, or the *Harmonics of Ptolemy*, with the *Commentaries of Porphyry* and *Manuel Bryennius* thereon, may be questioned, since Salinas, who wrote after him, intimates that in his time they were extant only in manuscript, and that by the favour of the Cardinal of Burgos he procured transcripts of them from the library of St. Mark at Venice.

† Joan. Alberti Banni *Dissertatio Epistolica de Musice-Natura*. Lugd. Bat. 1637, pag. 29. 37.

Delle Imperfettioni della moderna Musica, in two parts, with a view to correct some abuses in music which had been introduced by modern writers and composers ; he was the author also of a little tract in quarto, published in 1604, intitled '*Impresa del Molto R. M. Gioseffo Zarlino da Chioggia :*' of these an account will be given hereafter.

VINCENTIO GALILEI is next to be spoken of. He was of Florence, and as it seems a man of rank, for in the title-page of his books he styles himself '*Nobile Fiorentino*,' and the father of the famous Galileo Galilei, the mathematician. He had been a disciple of Zarlino, and, by the help of his instructions, joined with an unwearied application to the study of the ancients, became an excellent speculative musician. Of the instruments in use in his time, the lute and the harpsichord seem to have held the preference ; the latter of these was chiefly the entertainment, as Zarlino relates, of the ladies ;‡ the practice of the former was cultivated chiefly by the men. Galilei had an exquisite hand on the lute, and his propensity to that instrument, for very obvious reasons, led him to favour the Aristoxenean principles, which Zarlino throughout his works labours to explode. Galilei censured many of the opinions of his master in a tract intitled '*Discorso intorno all' Opere del Zarlino*,' which the latter has taken notice of in the second volume of his works ; but in 1581 he published a larger work, intitled '*Dialogo della Musica antica e moderna*,' written, as the title-page expresses it, '*in sua Difesa contra Giuseppe Zarlino*,' though the publication of this latter work was a formal attack on Zarlino, who is treated by his adversary with less respect than seems to be due from a disciple to his master ; this Zarlino seems to have resented, for in the *Sopplimenti* he takes notice of the urbanity, as he calls it, of the disciple to his preceptor, as an instance whereof he cites these words from the table to Galilei's Dialogue, '*Gioseffo Zarlino si attribuisce per sue molte cose che non sono*,' an expression not easily to be reconciled with the commendation which in many parts of this book he affects to bestow on Zarlino and his writings.

The division of the tetrachord which Galilei contended for, was that called the syntonous or intense diatonic of Aristoxenus, which supposes the diatessaron to contain precisely two tones and a half, according to the judgment of the ear. Ptolemy has given it the ratio of 12, 24, 24, but Galilei failed in his attempt to establish it ; and the syntonous or intense diatonic of Ptolemy is, as it is said, the only division which the moderns have received into practice.§

Galilei was also the author of a book intitled '*Il Fronimo, Dialogo sopra l'Arte del ben intavolare*

‡ Doni calls the harpsichord *Clavichordium Matronale*.

§ This is the sentiment of Dr. Wallis, as delivered by him in the Appendix to his edition of Ptolemy, and is confirmed by Dr. Pepusch in his letter to Mr. de Moivre, published in the *Philosophical Transactions* for the year 1746 ; nevertheless it is said that since the invention of a temperament the ancient distinctions of ditonic diatonic, intense diatonic, &c. have justly been laid aside. Vide *Harmonics* by Dr. Robert Smith, 2d. edit. pag. 33, this is the more likely to be true, as the tuners of instruments measure their intervals by the ear, and are therefore said by Mersennus to be Aristoxeneans in practice.

'e rettamente suonare la Musica. In Venezia, 1583;' the design whereof is to explain that kind of musical notation practised by the composers for the lute, called the *Tablature*.* The *Dialogo della Musica*, notwithstanding the objections it is open to, is replete with curious learning, and seems to have been the effect of deep research into the writings of antiquity. Among other particulars contained in it are these. The *Battuta*, or beating of time, was not practised by the ancients, but was introduced by the Monks for the regulation of the choir, 101.—The monochord was invented by the Arabians, 133.—Diocles, and not Pythagoras, in the opinion of some, first discovered the musical proportions by the sound of an earthen vessel, 127.—Glareanus did not understand the modes of the ancient Greeks, 72.—Marcianus Capella, so far as relates to the modes, was an Aristoxenian, 56.—The music of the moderns is despised by the learned, and approved of only by the vulgar, 83.—The Romans derived their knowledge of music from the Greeks, 1.—At the close of this work he gives a probable account of the inventors of many of the instruments now in use, of which notice has herein before been taken. Speaking of the lute, he mentions a fact which an English reader will be glad to know, namely, that in his time the best were made in England. The style of Galilei is clear and nervous, but negligent. Nice judges say it is in some instances ungrammatical, nevertheless, to speak of his *Dialogue* on ancient and modern music, it abounds with instruction, and is in short an entertaining and valuable work.

CHAP. LXXXV.

FRANCISCUS SALINAS flourished about the middle of the sixteenth century; he was a native of Burgos in Spain, and the son of the questor or treasurer of that city; and though he laboured under the misfortune of incurable blindness, composed one of the most valuable books on music now extant in any language. His history is contained in the preface to his work published at Salamanca in 1577, and is so very curious, that it would be doing an injury to his memory to abridge it.

'From my very infancy I devoted myself to the study of music; for as I had sucked in blindness from the infected milk of my nurse, and there remaining not the least hope that I should ever recover my sight, my parents could think of no employment so proper for me as that which was now suitable to my situation, as the learning necessary for it might be acquired by the sense of hearing, that other best servant of a soul endued with reason.

'I employed almost my whole time in singing and playing on the organ, and how much I succeeded therein I leave to the judgment of others; but this

* The *TABLATURE* is a method of notation adapted to the lute, and other instruments of the like kind, in which the chords are represented by a corresponding number of lines, and on these are marked the letters a, b, c, &c. which letters refer to the frets on the neck of the instrument. The time of the notes is signified by marks over the letters of a hooked form, that answer to the minim, crotchet, quaver, &c., this is the French tablature, but the Italians, and also the Spaniards, till of late years made use of figures instead of letters. Galilei's *Dialogue* teaches the tablature by figures, the other method is explained in a book written by Adrian le Roy of Paris, in 1578, the first of the kind ever published, of which a full account will hereafter be given.

'I dare affirm, that he who would perfectly understand the doctrine of Aristoxenus, Ptolemy, and Boetius, and other famous musicians, should be long and much practised in this part of music, since every one of those has written concerning the first part of music which is called *Harmonics*, and belongs to the composition of instrumental harmony; and a man who is versed in the musical instruments which we make use of, will be able to judge more readily and perfectly of those things. But lest I should seem to say more of the studies of other men than of my own, be it known that while I was yet a boy there came into our country a young woman born of honest parents, and famous for her knowledge of the Latin language, who, as she was about to become a nun, had a vehement desire of learning to play on the organ, wherefore she became a sojourner in my father's house, and was taught music by me, and she in return taught me Latin, which perhaps I should never have learned from any other, because either that never came into my father's head, or because the generality of practical musicians persuaded him that letters would prevent or interrupt my learning of music; but I growing more eager for instruction from this little of learning that I had now got, prevailed on my parents to send me to Salamanca, where for some years I applied myself closely to the study of the Greek language, as also to philosophy and the arts, but the narrowness of my circumstances obliging me to leave that university, I went to the king's palace, where I was very kindly received by Petrus Sarmenius, archbishop of Compostella; and as he was afterwards taken into the number of cardinals, I went with him to Rome, more for the sake of learning than of enriching myself, where conversing with learned men, of whom there is always a great number there, I began to be ashamed of my ignorance in the art which I professed, not being able to give any reason for those things I spoke of; and I at length perceived this saying of Vitruvius to be very true, and that it might be applied as well to music as architecture, viz., "Those who labour without learning, let them be ever so well versed in the practice, can never gain any credit from their labours; and those who place their whole dependance on reasoning and learning alone, seem to pursue the shadow and not the thing; but those who are masters of both, like men armed from head to foot, attain their ends with greater facility and reputation." Wherefore when I found from Aristotle that the ratios of numbers were the exemplary causes of consonants and harmonical intervals, and perceiving that neither all the consonants nor the lesser intervals were constituted according to their lawful ratio, I endeavoured to investigate the truth by the judgment both of reason and the senses, in which pursuit I was greatly assisted, not only by Boetius, whom every musician has in his mouth, but by several manuscript books of the ancient Greeks not yet translated into Latin, great plenty whereof I found there, but above all, three books of Claudius Ptolemæus (to whom whether music or astronomy be most indebted I cannot say)

‘on harmonics, from the Vatican library, and of Porphyrius’s Comments thereon, constructed of great and valuable things collected from the reading of the ancients, which were procured for me by Cardinal Carpensius; also two books of Aristoxenus De Harmonicis Elementis, and also two books of Nicomachus, whom Boetius has followed, one book of Bacchius, and three books of Aristides, likewise three of Bryennius, which the Cardinal of Burgos caused to be transcribed at Venice from the library of St. Mark; so that being made more learned by what they had well and truly said, and more cautious by what was otherwise, I was able to attain to an exact knowledge of this art, in the search and examination whereof I spent upwards of thirty years, till at length, oppressed by many misfortunes, more especially by the death of the two cardinals and the viceroy of Naples, who all loved me more than they enriched me, and by the loss of three brothers, who were all slain, I determined to return to Spain, content with what little I had, which might serve to supply me with a very slender maintenance; and I also proposed to spend the small remainder of my life within my own walls in an honest poverty, and sing only to myself and the Muses:

Nam nec divitibus contingunt gaudia solia,

Nec vixit male, qui natus moriensque fefellit.

But I imagine it seemed good to the greatest and best God that it should be otherwise, for he recalled me into Spain from Italy, where I had lived almost twenty years, not altogether in obscurity, and of all the other towns in Spain in which I might have practised the musical art with sufficient premiums, permitted me at length to return to Salamanca, after an absence of almost thirty years from the time I had left it, where a stipend sufficiently liberal was appointed for a professor of music capable of giving instructions both in the theory and practice. For Alphonsus king of Castile, the tenth of that name, and surnamed the Wise, who founded and endowed this professorship, knew that the science of music, no less than the other mathematical arts, in which he greatly excelled, ought to be taught; and that not only the practical but the speculative part was necessary for a musician. Wherefore he erected that school among the first and most ancient, and as a teacher was at that time wanted, and one was sought after who was capable of teaching both parts of music well, I came to Salamanca, that I might hear the professors of this art make their trials of skill there; but when I had exhibited a specimen of my studies in music, I was adjudged qualified for that employment, and obtained the chair, which was thereupon endowed with nearly double the usual stipend by the approbation of his majesty. Perhaps I have said more than is necessary concerning myself, but I mention these things that I might not be thought to attempt so great a work destitute of all assistance.

To these particulars which Salinas has related of himself and his fortunes, the following, grounded on the testimony of others, may be added, viz., that being an admirable performer on the organ and other instruments, he was in great esteem among persons of rank,

and particularly with Paul IV. then pope, by whose favour he was created Abbat of St. Pancratius della Rocca Salegna, in the kingdom of Naples. Thuanus relates that he died in the month of February, 1590, being seventy-seven years of age. Johannes Scribanus, a professor of the Greek language, his contemporary, wrote the following verses in praise of him:—

Tiresiae quondam cæco pensaverat auctor

Naturæ damnum munere fatidico.

Luminis amissi jacturam cæcus Homerus

Pignore divini sustinet ingenii.

Democritus visu cernens languescere mentis

Vires, tunc oculos eruit ipse sibi.

His ita dum doctæ mentis constaret acumen,

Corporis æquanimi damna tulere sui.

Unus at hic magnus pro multis ecce Salinas

Orbatus visu, prestat utrumque simul.

The treatise De Musica of Salinas is divided into seven books; in the first he treats of proportion and proportionality, between which two terms he distinguishes, making Proportion to signify the ratio between two magnitudes, and Proportionality a certain analogy, habitude, or relation between proportions themselves. He says that as proportion cannot be found in fewer than two numbers, so proportionality must consist at least of two proportions and three numbers, whose mean divides them agreeably to the nature of the proportionality. He says that in the time of Boetius no fewer than ten different kinds of proportionality were known and practised by the arithmeticians, but that all that are necessary in the speculative part of music are those three invented by Pythagoras, and mentioned by Aristotle and Plato, namely, arithmetical, geometrical, and harmonical, concerning which severally he thus speaks:

‘We call that an Arithmetical mean which is separated from either extreme by equal differences and unequal proportions; by Differences we mean the quantities of the excesses which are respectively found between the numbers themselves, as in the proportion of 8 to 4; we say that 6 is an arithmetical mean because it is distant from each term by an equal difference, which is the number 2, but the proportions between the mean and the extreme terms are unequal, for 6 to 4 makes a sesquialtera, and 8 to 6 a sesquitercia, as plainly appears in these numbers, 4, 6, 8, in which the difference is the same between 6 and 4 as between 6 and 8, for each is equal to 2, whereas the proportions are unequal, as we have said. What is to be chiefly considered in this kind of proportionality by the musician is, that in it the greater proportions are found to be placed in the smaller numbers, and the lesser in the greater, as in this duple, 4 to 2, which when divided by the arithmetical mean 3, gives the sesquialtera and sesquitercia, the greater of which proportions, the sesquialtera, is found in the lesser numbers 3 to 2, and the lesser, the sesquitercia, in the greater numbers 4 to 3, as these numbers shew, 2, 3, 4. But the readiest method of finding an arithmetical mean is by adding the two extremes together, and the half of their sum when taken will be the mean required; as in this same duple 4 to 2, the sum of whose terms

'is 6, and the half thereof 3, is the arithmetical mean between them. It is to be observed that if the number arising from the sum of the two extremes be uneven (which is the case when one is even and the other uneven), and consequently the half thereof cannot be had, you must double the extremes, and then their sum will be an even number, and its half may be found; thus between 3 and 2, because their sum 5 is an uneven number, no arithmetical mean can be found in whole numbers, for they are distant from each other only by unity, which is indivisible, wherefore they must be doubled, to have 6 and 4, which being added together make 10, and the half thereof 5 will be the mean between them, and this is sufficient for the explanation of arithmetical proportionality.

'Geometrical proportionality is that in which the mean is distant from each extreme by equal proportions and unequal differences, as in the proportion 4 to 1, the geometrical mean will be 2, which is the duple of 1, as 4 is of 2, but the differences are unequal, because 2 is distant from 1 by unity, and from 4 by 2, as these numbers shew:—

Difference		
2		1

4	2	1

Duple		Duple

Quadruple		

{ Geometrical division of the quadruple.

'This kind of mediation is not so often to be found as either of the others, because it can only be had in those numbers that are compounded of two equal ones, as the quadruple, the sum whereof is two duples, as is shewn in the above type, and the nonuple or ninefold, which consists of two triples, as 1, 3, 9, and in these, 9, 4, which include two sesquialteras, as appears in these numbers, 4, 6, 9, and in these numbers, 25, 9, which contain 2 superbipliant 3, as these numbers shew, 9, 15, 25; and thus examples are frequently to be met with in all kinds of proportions except in such as are superparticular, for a superparticular proportion cannot be divided into two equal proportions in a certain determined number. This proportionality has this peculiar to it, that what in it is called the geometrical divisor or the mean, being multiplied into itself, will give the same product as arises from the multiplication of the two extremes into each other, as in this proportion, 9 to 4, whose geometrical mean is 6, that number bearing the same proportion to 4 as to 9, each being a sesquialtera to the mean 6, with unequal differences, for 6 is distant from 4 by 2, and from 9 by 3. I say that 6 multiplied into itself will yield the same product 36 as is made by the multiplication of 9 into 4; wherefore there is no readier method of finding out a geometrical mean than to multiply into each other the two numbers of such a proportion as we propose to divide geometrically, and then to find out some intermediate number, which being multiplied into itself, will produce the same sum as they did: thus if we would divide geometrically the proportion 16 to 9, we shall find

'the product of these two multiplied into each other to be 144, and as there cannot be any other number than 12 found, which being multiplied into itself will make that sum, that will be the geometrical divisor required, for it bears the same proportion to 9 as it does to 16, that is a sesquitertia. These things are esteemed requisite for musicians to consider, and I shall now only advertise the reader, that the numbers which express in the lowest terms any proportion that may be divided geometrically will be squares, for if the number can be divided into equal proportions, as the geometrical proportionality requires, it must necessarily be also compounded of two equal proportions, which composition we have in another place called Doubling: now the doubling of any proportion is made by the squaring of the two numbers under which it was comprehended when single, wherefore those numbers in which the proportion is found to be doubled must be squares.

'It now remains to speak of Harmonical Proportionality, which seems to have been so called as being adapted to harmony, for consonants are by musicians called harmonies, and answer to proportions divided by an harmonical mediation. The harmonical proportionality is that in which the mean, when compared to the extremes, observes neither the equality of differences as in the arithmetical mean, nor that of proportions, as the geometrical proportionality does, but is of such a nature, that whatsoever proportion the greater extreme bears to the lesser, the same will the excess of the greater extreme above the mean bear to the excess of the mean above the lesser extreme, as in this proportion, 6 to 3, in which the harmonic mean is 4, for the difference between 6 and 4, which is 2, bears the same proportion to the difference between 4 and 3, that is unity, as is found from 6 to 3, for they are each duple, as appears in these numbers:—

Duple		
2		1

6	4	3

Sesquialtera		Sesquitertia

Duple		

} Differences of the mean and extremes.
} Harmonical division of the duple.

'Plato in Timæus seems to have expressed this much more concisely and elegantly when he says the harmonic mean exceeds one extreme, and is also exceeded by the other by the same parts of those extremes respectively, as 8 between 6 and 12, for 8 exceeds 6 by the third part of 6, and is exceeded by 12 by the third part of 12. It is to be observed that the harmonical proportionality is nothing else than the arithmetical inverted, for it is found to be divided into the same proportions, excepting that the greater proportions are found in the arithmetical division between the lesser numbers, but in the harmonical they are transferred to the greater numbers, while the lesser proportions (as must be the case) are found in the lesser numbers, and if possible remain in the same numbers in which they were before, as in this duple arithmetically divided, 2, 3, 4,

' which if we would have mediated harmonically, the ' sesquialtera proportion, which is between 3 and 2, ' must be transferred to greater numbers; and in ' order to leave the sesquitertia in the same as they ' were in, viz., 4 to 3, we must try whether 4 has a ' sesquialtera above it, which it will consequently ' have if it is increased by its half 2, to produce the ' number 6, which is sesquialtera to 4, and the sesqui- ' tertia from 4 to 3 will be left as it was before; and ' thus the greater proportion is in the greater num- ' bers, and the lesser in the lesser, according to the ' property of harmonical proportionality, which these ' numbers shew :—

Harmonical Proportionality.				
Arithmetical Proportionality.				
2	3	4	6	
Sesquialtera	Sesquitertia	Sesquialtera		
Duple.				
Duple.				

' It now remains carefully to investigate the method ' of obtaining the harmonical mean, which will be ' easily found out if the arithmetical mean be first ' had, for where an arithmetical mean cannot be ' found, there also an harmonical mean cannot be had, ' since the harmonical proportionality, as we have ' said, is the arithmetical inverted. Having therefore, ' according to the method shewn above, found out the ' arithmetical mean, we must next enquire whether ' that has a number above it in the same proportion ' to it as subsisted between the numbers divided by ' the arithmetical mean, and if it has such a one, then ' that will be the mean which will divide the propor- ' tion harmonically, in which proportion that number ' which was the mean in the arithmetical proportion- ' ality will be the least extreme in the harmonical, ' and that which was the greatest extreme in the ' arithmetical, will be the harmonical mean, and the ' assumed number will be the greatest extreme; thus ' if we would harmonically divide this triple, 3 to 1, ' we must first find its arithmetical mean, which is 2, ' and then take the triple thereof, which is 6, and so ' the proportion which was arithmetically divided ' from 3 to 1, will be harmonically divided from ' 6 to 2; and 3, which was the greatest extreme in ' the arithmetical, will be the mean in the harmonical, ' and 2, which was the arithmetical mean, will be the ' lesser extreme, and 6, the number assumed will be ' the greater, as may be perceived in these numbers :—

Triple arithmetically divided.		
Lesser extreme	Arithme- tical mean	Greater extreme
1	2	3
	Lesser extreme	Harmoni- cal mean.
		Greater extreme
Triple harmonically divided.		

' But if no number can be found to bear the same ' proportion to the arithmetical mean as subsisted ' between these which it divided, the numbers must ' be doubled or tripled till such an one can be found ;

' this, however, is not to be done rashly, but by some ' certain rule, for in multiples they are almost always ' found as in the duple and triple shewn before, and ' in the quadruple and quintuple in these numbers :—

1	4			Quadruple to be divided.
2	5	8		Quadruple arithme- tically divided.
	5	8	20	Quadruple harmo- nically divided.
		Quintuple arithme- tically divided.		
1	3	5	15	
		Quintuple harmo- nically divided.		

' And examples of this kind are everywhere to be ' met with in almost all multiples. But in superpar- ' ticulars we must proceed by much more certain and ' constant rules; for as in finding an arithmetical ' mean in every superparticular proportion the num- ' bers must be doubled, so in finding an harmonical ' mean they must in the sesquialtera be doubled, in ' the sesquitertia tripled, in the sesquiquarta quadru- ' pled; and if this order be observed, the harmonical ' mean may be easily found in all superparticulars, as ' is manifest in these three examples :—

EXAMPLE I.

- ' 2. 3. Sesquialtera to be divided.
- ' 4. 5. 6. Sesquialtera divided arithmetically.
- ' 8. 10. 12. The Numbers of the arithmetical pro- ' portionality doubled.
- ' 10. 12. 15. Sesquialtera harmonically divided.

EXAMPLE II.

- ' 3. 4. Sesquitertia to be divided.
- ' 6. 7. 8. Arithmetically divided.
- ' 18. 21. 24. Numbers tripled.
- ' 21. 24. 28. Harmonically divided.

EXAMPLE III.

- ' 4. 5. Sesquiquarta to be divided.
- ' 8. 9. 10. Arithmetically divided.
- ' 32. 36. 40. Numbers quadrupled.
- ' 36. 40. 45. Harmonically divided.'

Speaking of the Diapason, Salinas says though it consists of eight sounds, it did not take its name from the number 8, as the diapente does from 5, and the diatessaron from 4, but it is called diapason, a word signifying 'per omnes' or 'ex omnibus', that is to say, by all or from all the sounds, as Martianus Capella asserts, and this with very good reason, for the diapason contains in it all the possible diversities of sound, every other sound above or below the septenary, being but the replicate of some one included in it.*

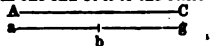
* The Unison, though in a sense somewhat different from that of Martianus Capella in the above passage, may also be said to contain in it, if not all the sounds, at least all the consonances in the septenary, together with their replicates. To explain this matter, it is necessary to observe that Aristotle in Prob. XVIII. of his 19th Sect. puts this question, Why do the graver sounds include the acuter? and Mersennus, who has taken upon him the solution of it, in the course of his investigation asserts from experiments made by himself, that a chord being struck when open, gives no fewer than five different sounds, namely the unison, octave, 12th, 15th, and greater 17th, and, to a very nice ear, the greater 22d.

In the eighth and ninth chapters of his second book he contends against the modern musicians that the diatessaron is to be deemed a consonant;* and in

Harmonic. De Instrum. Harm. lib. I. prop. xxxiii. Harm. Univers. lib. IV. pag. 209.

The Oscillation of chords is a subject of very curious speculation, and the above is a wonderful phenomenon; but neither Mersennus, nor even Aristotle himself, seems to have been acquainted with another not less so, namely, that which proves that the vibrations of chords are communicated at a distance to other chords tuned in consonance with themselves.

An account of this discovery communicated by Dr. Wallis to the Royal Society may be seen in Lowthorp's *Abridgment*, Vol. I. chap. x. pag. 606, and is to this effect, Let a chord A C be an upper octave to another a g, and therefore an unison to each half of it stopped at b. If while a g is open A C be struck, the two halves of this other, that is a b and b g, will both tremble, but not the middle point at b, which will easily be observed if a little bit of paper be lightly wrapped about the string a g, and removed successively from one end of it to the other



This discovery it seems was first made by Mr. William Noble of Merton college, and after him by Mr. Thomas Pigot of Wadham college. Long after that Monsieur Sauveur communicated it to the Royal Academy at Paris as his own discovery; but upon his being informed by some of the members present that Dr. Wallis had published it before, he immediately resigned all the honour thereof. There is an exquisite solution of these and other phenomena of sounds by Dr. Narcissus Marsh, in Dr. Plot's *Natural History of Oxfordshire*.

* Hardly any question has been more agitated by the modern musicians than this, whether the diatessaron be a concord or a discord? The arguments to prove it the former are hardly anywhere so well enforced as in a very learned and ingenious book intitled *The Principles of Music in Singing and Setting*, with the twofold Use thereof, ecclesiastical and civil, by Charles Butler, of Magdalen college, Oxford, quarto, 1686, pag. 54, in not. and are to this purpose:—

'This concord is one of the three, so famous in all antiquity, with the symphony whereof the first musicians did content themselves; and for the inventing of whose proportions, that most ancient and subtle philosopher Pythagoras has been ever since so much renowned among all posterity. The joint doctrine of these three concords, though it be as ancient as music itself, approved not only by Pythagoras, but also by Aristotle, Plato, Ptolemy, Euclid, and by Aristoxenus, Boetius, Franciscus, Placanus, and all learned musicians; yet some pregnant wits of later times, have made no bones to teach the contrary; and now, forthwith this diatessaron, which for thousands of years hath been a special concord, without any the least impeachment or question, must needs upon the sudden be reckoned among the discords: and that not only authority, but reason also, and the very judgment of the ear, remaining. For he that listeth to try upon the organ or well-tuned virginal, shall find that of itself it doth well accord with the ground, and better than either of the other secondary concords (the sixth or imperfect third) and with a sixth to yield as true a symphony as a third with a fifth: and more sweet than a third with a sixth: and with a sixth and an eighth, to sound fully and harmoniously in pleasing variety among other symphonies. So that although being no primary concord, it be not set to the base in a close; yet is it good in other places, even immediately before the close, and that in slow time, as in this example:—



'Moreover, albeit before the close, a discord, either with the bass, or with an other part, be sometimes allowed (the note being but of short time, and a sweetening concord presently succeeding) yet in the close (where all parts meet together) in a long-timed note, not without some pause upon it (so that the ear doth especially attend it) there is never any discord at all: but all the upper notes are concords of one sort or other: and those as primary to the bass, so secondary among themselves. For example, where the close note of the bass is in G-A-M-U (and consequently those of the other parts in B-M-I, D-SOL-A-E, and G-SOL-A-E-U, or their eighth) B-M-I being a perfect third to the bass, is an imperfect third to D-SOL-A-E, and a sixth to G-SOL-A-E-U: and likewise D-SOL-A-E being a fifth to G-A-M-U, is a third imperfect to B-M-I, and a fourth to G-SOL-A-E-U. Seeing then that in closes, which are simply harmonious, no discord is admitted, but all notes concord among themselves; it follows that a fourth as well as a sixth, or an imperfect third must be a concord: and seeing that a ground and his eighth are as it were all one, how can any man think that D-SOL-A-E, which is a fifth unto G-A-M-U, and a fourth unto G-SOL-A-E-U [his eighth] should be the sweetest concord unto the one, and a discord unto the other; and yet that B-M-I, which is but a third unto the ground, should be a concord also to the eighth.

'And therefore that honourable sage [Lord Verulam] whose general knowledge and judgment in all kind of literature is generally applauded by the learned, rejecting their novel fancy that reject this ancient concord, professes himself to be of another mind. "The concords in music," saith he, "between the unison and the diapason are the fifth: which is the most perfect, the third next: and the sixth, which is more harsh: and (as the ancients esteemed, and so do myself and some others) the fourth, which they call diatessaron. Cent. II. Numb. 110. Among those others, that singular musician (to whom the students of this abstruse and mysterious faculty are more beholding, than to all that ever have written thereof) Sethus Calvisius is one. His words are these: "Rejicitur hodie à plerisque musicis ex numero consonantiarum, diatessaron, sed minus rectè. Nam omnes musici veteres, tam Græci quàm Latini, eam inter consonantias collocarunt: id quod monumenta ipsorum testantur. Deinde quia conjuncta cum aliis intervallis, partem consonantiam: ut si addatur ad diapente, fit diapason: si ad ditonem, vel trihemitonion, fit sexta major aut minor. Nihil autem quod in intervallis plurium proportionum consonat, per se dissonare potest. Tertio, si chordæ in instrumentis musicis, exactè juxta proportionem veras intenduntur; nulla dissonantia in diatessaron apparet; sed ambo soni uniformiter et cum suavitate quadam aures ingrediuntur: sic in testudinibus chordæ graviores inter se distant, et ratione diatessaron intenduntur. Quarto, nulla cantilena plurium vocum haberi potest, quæ careat hac consonantia. Nequaquam igitur est rejicienda; sed, propter usum, quæ in Melopœia (si dextrè adhibeatur) habet maximum, recipienda."

the following chapter he with admirable ingenuity shews that the ditone and semiditone, though perhaps the last or lowest in degree, are yet to be ranked among the consonances; this he has almost made Ptolemy confess by the sense which he puts upon the sixth chapter of his first book, but his own arguments in favour of his position are the most worthy our attention, and they are comprised in the following passage:—

'Next after the diapente and diatessaron are formed by a division of the diapason, the ditone is easily to be found, and after that the semiditone, which interval is the difference whereby the diapente exceeds the ditone, for the diapente is no otherwise divided into the ditone and semiditone, than is the diapason into the diapente and diatessaron; and the division of the diapason being made into the diapente and diatessaron, which are, as has been said, the next consonants after it as to perfection, and consist in two proportions, the sesquialtera and sesquiquarta, which follow the duple immediately; reason itself seems to demand that the diapente, which is the greater part of the diapason, should be rather divided than the diatessaron, which is the lesser part; thus the diapente will be divided into the ditone and semiditone, as the sesquialtera ratio is into the sesquiquarta and sesquiquinta; for the terms of the sesquialtera ratio 2 and 3, because it cannot be divided in these, being doubled, there will arise 4 and 6, the arithmetical mean between which is 5, which is sesquiquarta to the lesser, and subsesequinta to the greater; and though these two proportions do not immediately follow the sesquialtera as that does the duple, yet they divide it by a division which is the nearest to equality; and in the same manner,

"saron, sed minus rectè. Nam omnes musici veteres, tam Græci quàm Latini, eam inter consonantias collocarunt: id quod monumenta ipsorum testantur. Deinde quia conjuncta cum aliis intervallis, partem consonantiam: ut si addatur ad diapente, fit diapason: si ad ditonem, vel trihemitonion, fit sexta major aut minor. Nihil autem quod in intervallis plurium proportionum consonat, per se dissonare potest. Tertio, si chordæ in instrumentis musicis, exactè juxta proportionem veras intenduntur; nulla dissonantia in diatessaron apparet; sed ambo soni uniformiter et cum suavitate quadam aures ingrediuntur: sic in testudinibus chordæ graviores inter se distant, et ratione diatessaron intenduntur. Quarto, nulla cantilena plurium vocum haberi potest, quæ careat hac consonantia. Nequaquam igitur est rejicienda; sed, propter usum, quæ in Melopœia (si dextrè adhibeatur) habet maximum, recipienda."

The several arguments contained in the above passage, with many others to the purpose, may be seen at large in a treatise written by Andreas Papius Gandensis, a man of excellent learning, and a good musician, entitled *De Consonantiis seu pro Diatessaron*. Antv. 1581.

But notwithstanding the authorities above-cited, it seems that those who scruple to call the diatessaron a consonant, have at least a colour of reason on their side; for it is to be noted of the other consonants, namely, the diapason and diapente, that their replicates also are consonants, that is to say, the fifteenth is a consonant, as is also the twelfth, which is the diapason and diapente compounded, but the diapason and diatessaron compounded in the eleventh do not make a consonance. Dr. Wallis assigns as a reason for this, that its ratio $\frac{3}{2} = \frac{3}{2} \times 2$, or in words, 8 to 3, equal to 4 to 3 multiplied by 2, is neither a multiple nor a superparticular. Wall. *Append. de Vet. Harm.* 328. He adds with respect to the solitary or uncompounded fourth, that the reason for not admitting it in composition is not because it is not a consonant, but because whenever its diapason is taken with it, as it frequently must be, it as it were overshadows or obscures it, and the fifth and not the fourth is the consonance heard. *Ibid.*

The observation of Dr. Wallis, that the Diapason cum Diatessaron is neither a multiple nor a superparticular, is grounded on a demonstration of Boetius in his treatise *De Musica*, lib. II. cap. xxvi. which see translated in the former part of this work, book III. cap. xxv. The title of the chapter in the original is 'Diatessaron ac Diapason non esse consonantiam, secundum Pythagoricos;' and it is highly probable that this assertion, and the singular property of the diatessaron above noted, might give occasion to Des Cartes to say, as he does in his *Compendium Musico*, cap. IV. that the diatessaron is of all the consonances the most unhappy.

‘though the ditone and semitone do not immediately follow the diapente but the diatessaron, yet they divide it as the diapente and diatessaron divide the diapason, that is to say, in proportions the nearest to equality that may be, and the ditone, as being the greater part of the diapente, is found in the greater proportion, that is the sesquiquarta, and is therefore justly called by practical musicians the greater third. But the semitone, which is the lesser part of the diapente, is in the sesquiquinta ratio, and is therefore justly called the lesser third. The analogy of this new division is approved both by the senses and reason, and therefore its description must by no means be omitted.

Diapason { Diapente { Ditone
 Diatessaron { Semitone

‘The same analogy is thus declared in numbers :—

1	Duple divided.		Sesquialtera divided.		6
	Duple undivided	Sesquialtera undivided	Sesquitertia	Sesquiquarta undivided	Sesquiquinta
2	2	3	4	5	6
1	Diapason undivided	Diapente undivided	Diatessaron	Ditone undivided	Semitone
	Diapason divided.		Diapente divided.		

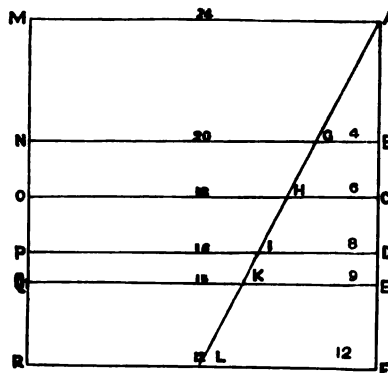
Salinas adds, that men always did and always will use the above consonances both in vocal and instrumental music, and not those of Pythagoras, some of which were not only dissonant, but inconcinuous, as the ditone 81 to 64, and the semitone 32 to 27. As to the ditone and semitone investigated by him, he says, as their proportions follow by a process of harmonical numeration, that of the sesquitertia, they must necessarily be consonants, and immediately follow the diatessaron. He concludes this chapter with observing that Didymus seems to be the first of musicians that considered the ditone and semitone as answering to the sesquiquarta and sesquiquinta ratios, and that the same may be gathered from those positions which Ptolemy has given in the second book, chap. xiv. of his Harmonics.

CHAP. LXXXVI.

HAVING thus shewn the ditone and semitone to be consonances, with the method of producing them, Salinas proceeds in the next subsequent chapters to explain how the lesser intervals are produced, by stating the several differences by which the greater exceed the lesser. The method taken by him for that purpose has been observed in a preceding chapter of his work, where the ratios of the several intervals are treated of, and therefore need not be here repeated.

In the nineteenth chapter of the same second book is contained a description of an instrument invented by Salinas for demonstrating the ratios of the consonances, as also of the lesser intervals. He says that this instrument is much more complete than the Helicon of Ptolemy, described in the second book of his Harmonics, for that in the Helicon are only five consonants of the Pythagoreans, and the diapason cum diatessaron, which Ptolemy himself added, and

of the dissonances, the tone major, and the diapason cum tono majori, whereas he says in this instrument the unison and seven consonants are found within the diapason, five more within the diadiapason, and two beyond it; and of the dissonant intervals, not only the greater tone, and diapason with the greater tone, as in that, but also the lesser tone and greater semitone; so that, as he says, not one of the simple intervals proper to the diatonic genus is undefined by this invention of his, as may be seen in the explanation subjoined to the type thereof exhibited by him, and which type is as follows :—



EXPLANATION.

‘The side AR of this square is divided into many parts, first into two equally at the point C , then into three at the points B and D , and lastly into four, to give the point E , so that the whole line AR is triple of the part AB , duple of AC , sesquialtera to AD , and sesquitertia to AE . From these points are drawn the six parallel lines AM, BN, CO, DP, EQ , and FR , all of which, except the first, are, by a line drawn from the angle A , to the middle of the line FR , cut into two parts in the points G, H, I, K, L . If any one shall cause an instrument to be constructed of this form with chords, so that the stays which sustain the whole may fall in with the lines AR , and MR , and the chords with the other lines, and if a bridge be applied in the direction AL , I say that all the consonants and the lesser intervals of the diatonic genus will be heard therein; for as the sides of the similar triangles, which are opposite to equal angles, are proportional to each other by the fourth proposition of the sixth book of Euclid, therefore as the whole line AR is to its parts, so is the line FL to the sides that are parallel and opposite to it. Wherefore as the line AR of the triangle ARL is constituted sesquitertia to AE of the triangle AEK , FL will also be sesquitertia to EK , and if the line FL be made to consist of twelve parts, the line EK will contain nine of them; and by a like reasoning the lines DI will have 8, CH 6, and BG 4; and the upper line AM being double of FL , will contain 24. The remaining part of the lines beyond the bridge will contain as many parts as will complete the respective parts within the bridge to 24. So that GN will consist of 20, HO 18, IP 16, KQ 15, LR 12, and if every two of these numbers be compared together, the intervals which arise from strik-

'ing their respective chords will be perceived in this manner :—

- ' Unison 12 to 12.
- ' Greater semitone 16 to 15.
- ' Lesser tone 20 to 18.
- ' Greater tone twice, 9 to 8, 18 to 16.
- ' Semitone twice, 18 to 15, 24 to 20.
- ' Ditone twice, 15 to 12, 20 to 16.
- ' Diatessaron five times, 8 to 6, 12 to 9, 16 to 12, 20 to 15, 24 to 18.
- ' Diapente five times, 6 to 4, 9 to 6, 12 to 8, 18 to 12, 24 to 16.
- ' Lesser hexachord twice, 24 to 15.
- ' Greater hexachord twice, 15 to 9, 20 to 12.
- ' Diapason five times, 8 to 4, 12 to 6, 16 to 8, 18 to 9, 24 to 12.

' Some intervals repeated with the diapason.

- ' Lesser tone 20 to 9.
- ' Greater tone twice 9 to 4, 18 to 8.
- ' Diapason with the {
 - Ditone twice, 20 to 8, 15 to 6.
 - Diatessaron twice, 16 to 6, 24 to 9.
 - Diapente thrice, 12 to 4, 18 to 6, 24 to 8.
 - Greater hexachord 20 to 6.

' Disdiapason twice, 16 to 4, 24 to 6.

' Some intervals repeated with a disdiapason.

- ' Disdiapason with the {
 - Greater tone 18 to 4,
 - Ditone 20 to 4.
 - Diapente 24 to 4.

Upon this improvement of the Helicon of Ptolemy Salinas himself remarks in the words following :—

' I thought proper thus minutely to explain all the parts of this instrument because of its great and wonderful excellence. But what I think seems most worthy of admiration in it is, that it consists in sextuple proportion, wherein are contained all the consonants and dissonants. And hereby the wonderful virtue of the senary number appears, since not only six simple consonants are found in the six first numbers, and in the six first simple proportions, and also in the six first which successively arise by multiplication (so that we cannot either in the one or the other proceed farther to any other consonants or harmonical intervals) but also you may find consonants and dissonants constituted in all the six kinds of proportion, that is to say, in one of equality, and five of inequality, if you are minded to investigate their lawful proportions in numbers.' *

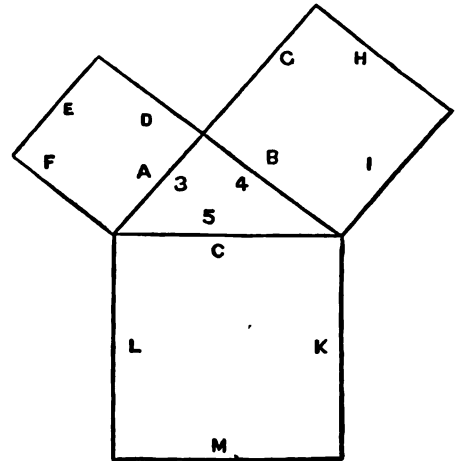
* The investigation of so great a number of consonant and dissonant intervals as are above given by means of so simple an instrument or diagram as this of Salinas, is a very delightful speculation. But it has lately been discovered that from the famous theorem of Pythagoras, contained in the 47th Proposition of the first book of Euclid, the consonances and dissonances may with no less a degree of certainty be demonstrated than by the above method of Salinas. The author of this discovery was Mr. John Harrington, of the well-known family of that name, near Bath. This gentleman made the important discovery above-mentioned, and in the year 1693 communicated it to Mr. Newton, afterwards Sir Isaac, in a letter, which, with the answer, are here inserted from a miscellany entitled *Nugæ Antiquæ*, published in 1769 :—

' Sir,—At your request I have sent you my scheme of the harmonic ratios adapted to the Pythagorean proposition, which seems better to express the modern improvements, as the ancients were not acquainted with the sesquialateral divisions, which appears strange. Ptolemy's Helicon does not express these intervals, so essential in the modern system, nor does the scheme of four triangles or three express so clearly as the squares of this proposition. What I was mentioning concerning the similitude of ratios as constituted in the sacred architecture, was my amusement at my leisure hours, but am not master enough to say much on these curious subjects. The given ratios in the dimensions of

In his demonstration that the ratio of a comma is 81 to 80, and that it is the difference between the tone major and tone minor, he says that the comma is the

' Noah's ark, being 300, 50, and 30, do certainly fall in with what I observed; the reduction to their lowest terms comes out 6 to 1, which produces the quadruple sesquialateral ratio, and 5 to 3 is the inverse of 6 to 5, which is one of the ratios resulting from the division of the sesquialateral ratio; the extremes are as 10 to 1, which produce by reduction 5 to 4, the other ratio produced by the division of the sesquialateral ratio. Thus are produced the four prime harmonical ratios, exclusive of the diapason or duple ratio. I have conjectured that the other most general established architectural ratios owe their beauty to their approximation to the harmonic ratios, and that the several forms of members are more or less agreeable to the eye, as they suggest the ideas of figures composed of such ratios. I tremble to suggest my crude notions to your judgment, but have the sanction of your own desire and kind promise of assistance to rectify my errors. I am sensible these matters have been touched upon before, but my attempts were to reduce matters to some farther certainty as to the simplicity and origin of the pleasures affecting our different senses, and try by comparison of those pleasures which affect one sense, from objects whose principles are known, as the ratios of sound, if other affections agreeable to other of our senses were owing to similar causes. You will pardon my presumption, as I am sensible neither my years nor my learning permit me to speak with propriety herein, but as you signified your pleasure of knowing what I was about, have thus ventured to communicate my undigested sentiments, and am, Sir, Your obedient servant, JOHN HARRINGTON.'

' Wadham-college, May 22, 1693.



DEMONSTRATION.

KLMCC : KLMCB = 25 : 24 3d	BA : CM = 7 : 10 5th
CML : IDGH = 15 : 16 2d	B : AD = 4 : 6 5th
CB : CM = 9 : 10 2d	CB : CMB = 9 : 14 5th
BC : BC = 8 : 9 2d	C : BG = 5 : 8 6th
BA : BG = 7 : 8 3d	A : C = 3 : 5 6th
AD : AB = 6 : 7 2d	BGH : AB = 12 : 7 7th
C : AD = 5 : 6 3d	AB : B = 7 : 4 6th
B : C = 4 : 5 3d	CB : BGH = 9 : 16 7th
BA : CB = 7 : 9 4th	C : CB = 5 : 9 7th
A : B = 3 : 4 4th	BC : CML = 8 : 15 7th
C : BA = 5 : 7 4th	CMLK : BG : CMLK = 48 : 25 7th

The above demonstration is given in the author's own figures and characters, but it seems in some instances to be rather inaccurately expressed; and perhaps it had been better if he had spoken thus: 25 to 24 semitone minus, 16 to 15 semitone major, 10 to 9 tone minor, 8 to 9 tone major, 6 to 5 third minor, 16 to 9 seventh minima, 9 to 5 seventh minor, 15 to 8 seventh major, 48 to 25 greatest, or sharp sharp seventh.

The following is the answer to Mr. Harrington's letter :

' Sir,—By the hands of your friend, Mr. Connel, I was favoured with your demonstration of the harmonic ratios from the ordinances of the 47th of Euclid. I think it very explicit, and more perfect than the Helicon of Ptolemy, as given by the learned Dr. Wallis. Your observations hereon are very just, and afford me some hints, which when time allows I would pursue, and gladly assist you with any thing I can to encourage your curiosity and labours in these matters. I see you have reduced from this wonderful proposition the inharmonics, as well as the coincidences of agreement, all resulting from the given lines 3, 4, and 5. You observe that the multiples hereof furnish those ratios that afford pleasure to the eye in architectural designs. I have in former considerations examined these things, and wish my other employments would permit my further noticing thereon, as it deserves much our strict scrutiny, and tends to exemplify the simplicity in all the works of the

least of all the sensible intervals, and that he had experienced it to be so by his ear, in an instrument which he had caused to be made at Rome, in which both tones are heard, and their difference was plainly to be perceived, and he infers from a passage in Ptolemy, where he makes it indifferent whether the sesquioctave or sesquinal tone have the acute place in the diatonic tetrachord, that the ear of Ptolemy was not nice enough to discern the difference between the greater and lesser tone.

Salinas observes, that besides the two semitones, the greater and lesser, into which the tone is divided, and which is the difference whereby the ditone exceeds the semiditone, there is a necessity for inserting into musical instruments, more especially the organ, another interval called the Diesis,* because without it there can be no modulating in that kind of music called by the Symphonetæ, *Musica ficta*,† in which there is occasion to make use of three diversities of *b* soft; nor ought this, he says, to be deemed a new invention, for, which is curious and worthy of observation, he

* Creator; however, I shall not cease to give my thoughts towards this subject at my leisure. I beg you to pursue these ingenious speculations, as your genius seems to incline you to mathematical researches. You remark that the ideas of beauty in surveying objects arises from their respective approximations to the simple constructions, and that the pleasure is more or less as the approaches are nearer to the harmonic ratios. I believe you are right; portions of circles are more or less agreeable as the segments give the idea of the perfect figure from whence they are derived. Your examinations of the sides of polygons with rectangles certainly quadrate with the harmonic ratios; I doubt some of them do not, but then they are not such as give pleasure in the formation or use. These matters you must excuse my being exact in during your enquiries, till more leisure gives me room to say with more certainty hereon. I presume you have consulted Kepler, Merenne, and other writers on the construction of figures. What you observe of the ancients not being acquainted with a division of the sesquialteral ratio is very right; it is very strange that geniuses of their great talents, especially in such mathematical considerations, should not consider that although the ratio of 3 to 2 was not divisible under that very denomination, yet its duple members 6 to 4 easily pointed out the ditone 4 to 5, and the minor tierce 6 to 5, which are the chief perfections of the diatonic system, and without which the ancient system was doubtless very imperfect. It appears strange that those whose nice scrutinies carried them so far as to produce the small limmas, should not have been more particular in examining the greater intervals, as they now appear so serviceable when thus divided. In fine, I am inclined to believe some general laws of the Creator prevailed with respect to the agreeable or unpleasant affections of all our senses; at least the supposition does not derogate from the wisdom or power of God, and seems highly consonant to the simplicity of the macrocosm in general. Whatever else your ingenious inquiries may produce I shall attentively consider, but have such matters on my mind that I am unable to give you more satisfaction at this time; however, I beg your modesty will not be a means of preventing my hearing from you as you proceed in these curious researches, and be assured of the best services in the power of

† Your humble servant,
 May 20, 1693. 'I A. NEWTON.'

* The author observes that the ancients gave a diesis to each of the three genera, that is to say, they called the least interval in each by that name. In short, the word diesis signifies properly a particle, and Macrobius uses it in that sense, and so explains it; but the diesis which Salinas is here for introducing, is that interval whereby the lesser semitone is exceeded by the greater, and is in the ratio of 128 to 125.

† *Musica ficta*, in English, feigned music, is by Andreas Ornithoparcus thus defined: '*Musica ficta* is that which the Greeks called *Synemmenon*, a song made beyond the regular compass of the scale; or it is a song full of conjunctions.' He means to say it is that kind of Cantus in which the tetrachord *synemmenon* is used, and which has for its final note or key some chord not included in the ordinary scale, as *B♭* or *E♭*. See a type of it in the account herein-before given of Ornithoparcus, book VIII. chap. lxviii. pag. 308.

It is pretty clear that at the time when Ornithoparcus wrote, that practice of dislocating the *xi*, which feigned music implies, was carried no farther than was necessary to constitute the keys *B♭* and *E♭*, each with the major third. As to the latter, it is said to have been first made use of by Clemens non Papa, who lived about the year 1560; and it is worthy of observation, that that great variety of keys which is created by the multiplication both of the acute and grave signatures, except in the above instances, is a modern refinement. Compositions in these keys, for example, *D* with a major third, *A* with a major third, *E* with a major third, *F♯* with a minor third, *F* with a minor third, and *B* natural with a minor third, are not to be traced much backward than to the middle of the last century, and probably owe their introduction to the improvements in the practice of the violin; else had they probably been included in the definition of *Musica ficta* by Ornithoparcus.

relates that the Italians have in their organs two dieses in every diapason, the one between *a*, diatonic, and *g*, chromatic, and another between *d*, diatonic, and *c*, chromatic;‡ and that on many such organs as these he had often played, particularly on a very famous one at Florence, in the monastery of the Dominicans, called *Santa Maria Novella*.

In the subsequent chapters of this second book are a great number of scales and diagrams, contrived with wonderful ingenuity to explain and illustrate the several subjects treated of in the book.

In the third book he treats of the genera of the ancients, and that with so much learning and sagacity, that, as has already been noted, Dr. Pepusch scrupled not to declare to the world that the true enarmonic, the most intricate of the three, and which has been for many ages past supposed to be lost, is in this work of his accurately determined.

From his representation of the ancient genera, that is to say, of the enarmonic, the chromatic, and even some species of the diatonic, it most evidently appears that they consisted in certain divisions of the tetrachord, to which we at this day are strangers; and it may farther be said that the intervals which divide both the chromatic and the enharmonic tetrachord, however rational they may be made to appear by an harmonical or numerical process of calculation, are to a modern ear so abhorrent as not to be borne without pain and aversion.

After what has been said in some preceding pages of this work touching the genera and their species, and from the testimony of some even of the Greek harmonicians herein-before adduced, it is clear beyond a doubt that both the enarmonic and chromatic genera are as it were by the general consent of mankind laid aside. It would therefore be to little purpose to follow Salinas through that labyrinth of reasoning by which he attempts to explain them; such as are desirous of full information in this respect must be referred to his own work. In order, however, to gratify the curiosity of others, and to display the depth of knowledge with which this author investigates the doctrine of the ancient genera, it may not be amiss here to subjoin the following extracts, which contain the substance of his arguments in the discussion of this curious subject.

A Genus in music, according to this author, is a certain habitude or relation which the sounds that compose the diatessaron have to each other in modulation.

Having thus defined the term Genus, in the doing whereof he has apparently taken Ptolemy for his guide, he thus farther proceeds to deliver his sentiments of the genera at large:—

'The ancients were unanimously of opinion that the genera were determined rather by the division of the diatessaron, that being the least, than of any other system or consonance; and this was not the sentiment of the Pythagoreans only, who held that there could be no consonance of a less measure than

‡ The passage in Salinas is as above, but it is to be suspected that the letter *c* is misprinted, and should have been *e*; and if so, this improvement of the organ by the Italians corresponds exactly with what is to be observed in some organs in this country, that in the Temple church in particular, wherein are several keys for *g♯* and *a♯*, and for *d♯* and *e♯*, from the lowest to the highest in the range.

'two tones, but also of Aristoxenus himself, who, though he taught that the differences of the intervals were not commensurable by numbers and their portions, but that the senses were the proper judges thereof, asserts in the first book of his *Elements of Harmony*, that no consonance can be found of a less content than that between the unison and its fourth; a position which, however, we have shown not to be strictly true, whether we appeal to the judgment of our senses or our reason. Not to enter into too scrupulous a discussion of this matter, let it suffice to say, that for the purpose of defining the genera, all the ancients to a man have supposed a division of the diatessaron into four sounds or three intervals, from which method of division are constituted the three genera: the difference between each of these is generally denoted by the epithets *rarum*, rare or thin; *spissum*, thick or close set; and *spississimum*, thickest or closest set, according to the quantities of those lesser intervals by which they were severally divided: the primitive terms of distinction for the genera were those of *Diatonica*, *Chroma*, and *Harmonia*, though the writers of later times use those of *Diatonicum*, *Chromaticum*, and *Enarmonium*. The diatonicum was said to be rare because it proceeds by a tone, tone and semitone, which are the greatest and most rare of the lesser intervals: and Ptolemy asserts that this genus was called the *Diatonum* because it abounded in tones. The *Chromaticum* was that which proceeded by a trihemitone, a semitone and semitone; and because the semitones are thicker or closer than the tones, this genus was said to be thicker and softer than the diatonum. The word *Chroma*, which in Greek signifies colour, was applied to it, as Boetius writes, as being expressive of its variation from the diatonum, or, as the Greeks say, because that as colour is intermediate between white and black, so also does the chromatic genus observe the medium between the rareness of the diatonum and the thickness of the harmonia. The *Harmonia* or *Enarmonium* proceeded by a ditone, a diesis, and diesis towards the grave, and because the dieses are thicker than the semitones, this genus, which is the thickest of the three, was termed the *Enarmonium*, as being the best coadapted, and the most absolute of them all.*

'Nor did the ancients proceed any farther in the constitution of the genera than is above related, because in it no harmonical interval less than that of a diesis is discoverable except the comma, which is common to all the three; and though they may all seem to agree in dividing the diatessaron into three intervals in every genus, yet is there not one of those who have written on this subject that does not differ from the rest in determining the proportions of the several intervals that constitute it; for Pythagoras, Archytas, Philolaus, Eratosthenes, and, in a word, all the writers on this branch of the science have assigned to it different ratios all equally repugnant to harmonical truth. Those who are desirous of more particular information, may consult Boetius, book III. chap. v.; and Ptolemy, book II.

'towards the end. The most celebrated mode of generical division was undoubtedly that of Pythagoras, which constituted the diatonic diatessaron of two tones, both in a sesquioctave ratio, and that interval which was wanting to complete it, but this we have nevertheless shewn to be erroneous in the eleventh chapter of the second book of this work, where we have treated of the ditone and greater semitone, seeing that both the ditone and lesser semitone or limma are both abhorrent to harmony as is demonstrated by Ptolemy, and appears from reason itself. The division of Aristoxenus was esteemed the next after this of Pythagoras, to which it was contrary in almost every thing, for Aristoxenus thought it agreeable in the diatonic genus to proceed not only by equal tones, but also in the chromatic to proceed by two equal semitones, and in the enarmonic by two equal dieses. A third division, that of Didymus and Ptolemy, made neither the tones nor semitones equal, but constituted a greater and lesser of each.†

'The genera can neither be more nor fewer than three, because that is the number of the lesser intervals whereby they are distinguished from each other. In the diatonic the least interval is the greater semitone; in the chromatic the lesser; and in the enarmonic the diesis; and as the diesis is the least of all the intervals that can vary the genus, it follows that the enarmonic must be the thickest of them all; and the reason why the diatessaron was chosen as the fittest of the consonances to adjust the several genera by, was not because, as the ancients assert, it was the smallest of the consonances, for that it certainly is not, but because all those intervals which arise from the first division of the lowest consonances, were found once in the diatessaron, such as the greater tone, the lesser tone, and the greater semitone; for the greater and lesser tone arise from the first division of the ditone, and the greater tone and lesser semitone from the first division of the semiditone; but if these were respectively added, the one to the former and the other to the latter, the complement would be a diatessaron consisting of three intervals and four sounds, wherefore the constitution of the genera is not to be found in any of those less systems than the diatessaron; on the contrary, in the greater consonants, such as the diapente and diapason, we meet with a repetition of these three several intervals, for in the diapente the greater tone is found twice, and in the diapason three times, and the lesser tone and greater semitone are found twice in the diapason.‡

Although Salinas has laboured to explain the meaning of the terms *spissum* and non *spissum*, which so frequently occur in the writings of the ancients, and which are used to express a distinguishing property of the genera, he professes to use the epithet *spissum* in a sense different from that in which it was accepted by them: they called that constitution *spissum*, or thick, where the acutest interval was greater than the other two, as in the chromatic and enarmonic; and they called that non *spissum*, in

* Lib. III. cap. I. pag. 101.

† Lib. III. cap. I. pag. 102.

‡ Lib. III. cap. II.

which the two grave ones taken together were greater than the acute, as in the diatonic. 'But we, says this author, 'maintain that genus not to be thick 'wherein the consonants are found intermediated 'with thinner and fewer intervals, of which sort is 'the diatonum, in which the consonants are intersected by tones and a greater semitone, which are 'the thinnest of all the lesser intervals: the diatessaron, 'for example, is divided into three intervals; on the 'contrary, we say that that genus is thick in which 'all the consonants are intersected by thicker and 'more close intervals; such is the chromatic, which 'proceeds by a greater and lesser semitone, which 'are thicker intervals than tones, and in the composition of a perfect instrument divides the diatessaron into six intervals and seven sounds, but 'according to that which we use, the division is 'into five intervals and six sounds, for the trihemitone is not, as the ancients would have it, an interval of this genus, seeing it is truly a consonant, and 'consonants are not the intervals of any genus.* 'But the thickest of the genera is the enarmonic, 'because it proceeds by lesser semitones and dieses, 'which are indivisible intervals; nor can the ditone 'be said to be an interval of this genus, although as 'well the ancient writers as those of later times assert 'it to be so, because it is a true and perfect consonant, 'and, like all the rest, requires to be filled up, wherefore in this genus the diatessaron will have nine intervals and ten sounds.

'The constitution of all the genera is not to be sought for in the division of the diatessaron, it is 'only in the diatonic that this method is to be taken, 'for the intervals by which it proceeds are not to be found in any lesser consonant. But to discover the 'constitution of the chromatic, we assert that the division of the greater tone is sufficient, because all 'the intervals by which this genus proceeds are to be found once therein. For the consideration of the 'enarmonic genus the greater semitone is sufficient, 'for in that are all the intervals to be found through which this genus proceeds; all this is the effect of 'the great and wonderful constitution of the harmonical ratio. The diatessaron seems to have been 'assumed for displaying the diatonic genus, because 'it is the excess of the diatessaron above the diapente: 'the tone by which we explain the chromatic is the 'excess of the diapente above the diatessaron; and 'the greater semitone by which we declare the enarmonic is the excess of the diatessaron above the ditone. Moreover it is necessary to know that the 'three genera stand in the relation to each other of 'good, better, and best; for as good can exist by itself, but better cannot be without good, so may the diatonic exist alone, and become the foundation of the others, as is seen in the Cythara, wherein are no semitones but the greater, in which this genus 'abounds, for the lesser semitones are proper to the 'chromatic.

* Here Salinas cautions his reader not to be disturbed that the Diatessaron, which takes its name from the number four, and is therefore understood to consist of so many sounds, should here be said to contain six intervals and seven sounds, for that circumstance, he says, is peculiar to the diatonic.

'But although the diatonic be the most natural, 'yet, as Boetius says, it is the hardest of the three, 'and to soften or abate of this hardness was the 'chromatic invented, and yet the chromatic could 'not have existed without the diatonic, it being 'nothing else than the diatonic thickened; and such 'does that constitution appear to be which we find 'in those instruments that are struck with black and 'white plectra. As to the enarmonic, it is clear that 'it cannot subsist by itself, and being a compound of 'the other two, it is the thickest, best compacted, 'and most perfect; and no one can believe that any 'modulation could be made in either the chromatic 'or enarmonic separated from the diatonic, seeing it 'is impossible to proceed without it through the 'chromatic or enarmonic intervals, and this is not 'only shown by Ptolemy, but it is evident both to 'sense and reason.†

The notion which Salinas entertained of the genera was that the chromatic was the diatonic inspissated; and that the enarmonic was the chromatic inspissated, and in all his reasoning about them he supposes a necessity in nature for filling up those spaces or chasms, as he affects to consider them, which the difference between the greater and lesser intervals in the diatonic tetrachord seems to imply.

Of the several species of the diatonic, Salinas scruples not to prefer the syntonous or intense of Ptolemy, and says that if Plato had been sensible of its excellence, he would not have been so tormented as he was, at finding that the Pythagorean limma 256 to 243 was not superparticular, and therefore not in truth a proportion, but rather, as he is forced to term it, a portion, i. e. a particle or fraction.‡

CHAP. LXXXVII.

In the fifth chapter of his third book Salinas shews the method of constructing the type of the diatonic, which he does by such a division of the monochord as gives d d in the ratio of each to the other of 81 to 80, making thereby the one a tone minor, and the other a tone major above c; the former of these he calls d inferior, and the latter d superior, this distinction he observes in the succeeding types of the chromatic and enarmonic; that of the diatonic is as follows:—

144	135	120	108	96	90	81, 80	72
E	F	G	a	b	c	dd	e

Of the Chromatic he says, chap. vi., that it arose from that division of the tone which was invented to soften the harshness of the tritonus between F and b; and in chap. vii. he directs, by the division of the

† Lib. III. cap. ii.

‡ Lib. III. cap. iii. pag. 107.

monochord, the construction of the type of the chromatic genus.

As in the diatonic division he gives d inferior and d superior, so in this of the chromatic does he give F \sharp inferior, and F \sharp superior, and also b inferior and

b superior, besides G \sharp , c \sharp , and e \flat , distinguished by the short or different coloured plectra on the organ, harpsichord, and other instruments of the like kind.

The following is the type of the chromatic genus according to this author :—

2880	2700	2592	2560	2400	2304	2160	2025	2000	1920	1800	1728	1620	1600	1500	1440
E	F	F \sharp	F \sharp	G	G \sharp	a	b b	b	H	c	c \sharp	d d	d	e \flat	e
				6				5				27 0		25 24	
20	0	18		0	16	15						4			
5					4						8				
18	0	18		15		16	15	0	0		12				

In the eighth chapter of the same book Salinas remarks that the characteristic of the chromatic is its least interval, which is a lesser semitone, and is therefore called the chromatic diesis, and is the difference whereby the lesser tone exceeds the greater semitone. The type above given is exhibited in the seventh chapter, with this remark, that in it the lesser semi-

tone or chromatic diesis is found five times, that is to say, between F and F \sharp inferior, G and G \sharp , b superior and H, c \sharp and c, and e \flat and e.

In the same chapter he treats of the Enarmonic genus, which he says is the most perfect of all, as containing in it the other two; the following is the type of the enarmonic as given by him :

57600	55296	54000	51840	51200	50625	50000	48000	46080	45000	43200	41472	40960	40500	40000	38400	36864	36000	34560	33750	32400	32000	30720	30000	28800	
E	F \sharp	F	F \sharp	F \sharp	b	b	G	G \sharp	a \flat	a	F \sharp	F \sharp	b	b	b	F \sharp	c	c	d \flat	d	d	d	d \sharp	e \flat	e
		.	.					6					.	5			.	.				4	.		
		.	.	5				.				4	.	0			.	.				3	.		
		.	15				0	0			12		.	0			.	10					.		
	6							.	5								4						.		
	.			5				.	.				4										8		
	.							.	12		0			0					9			8			
	16			15			0	.			12											10			
6								15		0	0					12			0			10			
								5								4									

Upon which it is to be remarked, that the true enarmonic intervals are distinguished from the diatonic by a point placed over them.

As he had noted the chromatic by its diesis, which is the interval of a lesser semitone, so has he remarked that the characteristic of the enarmonic is the enarmonic diesis, which arises from a division of the greater semitone into a lesser semitone and a diesis, thus :—

GREATER SEMITONE.	
Chromatic Diesis.	Enarmonic Diesis.

120

125

128

Which lesser semitone, by the way, is no other than the chromatic diesis, and in its lowest numbers is 25 to 24. As to the enarmonic diesis, its ratio is above demonstrated to be 128 to 125, and it is the interval

between F \sharp inferior and G \flat inferior, that is to say, between the numbers 51840 and 50625, which are in the ratio of 128 to 125, for 51840 contains the number 405, 128 times, and 50625 contains the same number 405, 125 times. It is again found between a \sharp inferior and b inferior, that is to say, between the numbers 41472 and 40500, for the former of these contains the number 324, 128 times, and the latter contains the same number 125 times. The enarmonic diesis is elsewhere to be found in the above division of the diapason in three instances, but the two above given are sufficient to make it known.

It was necessary to be thus particular in the representation of Salinas's system of the genera, more especially the enarmonic genus, because he himself appears to be so confident of his skill in this abstruse part of the musical science, that he scruples not to

reprehend very roundly the Greek writers for mistakes about the genera; and speaking of his division of the enarmonic, he says, that if it be made as by him is directed, nothing in harmonics can be more absolutely just and perfect. It is positively asserted by Dr. Pepusch, in his letter to Mr. De Moivre, that Salinas has determined the enarmonic accurately: and it is more than probable that those are in the right who think so.

The diagrams made use of by Salinas to illustrate his doctrine of the genera, more especially the types, as he calls them, of each, are most astonishingly complicated, but very curious and satisfactory. It is to be remarked on this part of his work, that he meddles not with the colours or species of the genera. Of the diatonic, he has taken the syntonous or intense of Ptolemy; and in his description of the chromatic, he has given a representation which coincides with no one species of that genus, for it is neither the soft, the hemiolian, nor the toniac, but seems to be a division of his own. As to the enarmonic, it is well known that it admitted of no distinction into species.

That Salinas had any desire to restore the ancient genera is not to be inferred from the great labour he has bestowed in the explanation of them. He indeed seems to have been very solicitous to attemper some of the harsher intervals in the diatonic series, and for that purpose to have made an arrangement of the white and black plectra, as he calls them, a little differing from the ordinary one; and says that he had with him at Salamanca an instrument which he had caused to be made at Rome, wherein the tone between G and a is accurately divided. But the pains he has taken to ascertain the true division of the chromatic and enarmonic, seems to be resolvable into that eager desire of rendering the writings of the ancient Greeks intelligible, which he uniformly manifests in the course of his writings.

Seeing, then, that the world is in possession at last of the true enarmonic, it remains to be considered whether it must not at all times have been a matter rather of speculation than practice. Were we to think with the ancients, and adopt their reasoning about the *spissum* and non *spissum*, we should say that that series of harmonical progression which admitted of the smallest intervals, and left the fewest chasms in the system, approached the nearest to perfection; but this is a consideration merely speculative, and has as little to do with the sense of hearing as the external form of any given musical instrument with the hearing whereof we are delighted.

On the other hand, let any one make the experiment, and try the effect of such intervals as the enarmonic diesis, as above ascertained, on his ear, and he will hardly be persuaded that the genus to which it belongs could ever have been cordially embraced by the unprejudiced part of mankind.

To favour the opinion that it was never received into general practice, we have the testimony of some of the ancient writers themselves, who expressly say that on account of their intricacy both the chromatic and enarmonic grew very early to be disesteemed by the public ear, and gave way to that orderly pro-

gression the diatonic, which nature throughout her works seems to recognize as the only true and just succession of harmonical intervals.

In the thirteenth and subsequent chapters of his third book, Salinas treats of the temperament of the organ and other instruments. He says of the human voice that it is flexible, and being directed by that sense of harmony which is implanted in us, it chooses and constitutes that which is perfect, and preserves the consonants and the lesser intervals in their due proportions, no impediment intervening. Farther he says that it discriminates with the greatest exactness between the greater and the lesser tone, and that as the melody requires, it chooses either the one or the other; but in the organ and other instruments where the sounds are fixed, and are not determined by the touch of the performer, he says that the tones are of necessity equal, and that this equality is preserved by the distribution of the three commas, by which the three greater tones in the diapason exceed the lesser ones; so that by this distribution, the consonants and lesser intervals participate of that dissonance which in some part of the system or other is occasioned by the comma.

The system thus attempted is called by the Italians *Systema Participato*. It is mentioned in a preceding chapter of this work, and is described by Zarlino in his *Istitutioni Harmoniche*, part II. cap. xli. et seq.* Salinas says he himself when a youth at Rome, invented a *Systema Participato*, in nothing differing from that published by Zarlino, which he says is not to be wondered at, seeing that truth is but one and the same, and that it presents itself to all who rightly endeavour to investigate it.†

The fertility of Salinas's invention suggested to him various other temperaments, which he has described with his usual accuracy. After stating and comparing them, and giving the preference to the first, he proceeds in chap. xxvii. to show the bad constitution of a certain instrument begun to be constructed in Italy about forty years before the time of writing his book, that is to say, about the year 1537, concerning which he says that this instrument was called *Archicymbalum*, and that it divided each of the tones into five parts, giving to the greater semitone three, and to the lesser two; he says that this instrument was much esteemed, and was made use of by some musicians of great eminence. He says that as the diapason contains six tones and a diesis, it divided the octave into thirty-one parts;‡ but that they are dieses he absolutely denies. He then proceeds

* Bontempi has given a system of another form, which he calls *Systema Participato*, from its comprehending the diatonic and chromatic, but it seems to be no other than that now in practice, in which the diapason is divided into twelve semitones. Vide Bont. Hist. Mus. pag. 187.

† De Musica. lib. III. cap. xiv. Dr. Smith says that Salinas was the first inventor of a temperament, and that both he and Zarlino laid claim to the honour of the invention, and had a dispute about it. Harmonics, pag. 37, in a note. But this is hardly reconcilable with the declaration of Salinas above-mentioned, which seems to imply an inclination in him rather to waive than promote a dispute.

‡ Dr. Pepusch in his letter to Mr. De Moivre, herein before cited, says that this division of the octave into thirty-one parts was necessarily implied in the doctrine of the ancients; and that though the instrument above-mentioned was condemned both by Zarlino and Salinas, they condemned it without sufficient reason, for that Mr. Huygens having more accurately examined the matter, found it to be the best temperament that could be contrived.

to point out the defects of this instrument, and pronounces of it, that it was offensive to his ear, and was not constructed in any truly harmonical ratio.*

In the twenty-eighth and four subsequent chapters of his third book he takes occasion to speak of the lute, viol, and organ, and of certain temperaments the best adapted to each. In the former he says that although the viol by name is not to be met with in the writings of the ancients, yet Cassiodorus asserts that it is to be found described among their different kinds of Cythara; and he himself adds that in the works of Bede, an author sufficiently celebrated, it is expressly mentioned.

The eighth chapter of the fourth book contains

* There cannot be the least doubt but that the instrument above spoken of is the Archicembalo of Don Nicola Vicentino, though Salinas confesses himself at a loss to whom to ascribe the invention of it. Merseennus once thought it was invented by Fabius Columna. Harmonic, lib. VI. De Generibus et Modis, Prop. xiii. From these two particulars it may be inferred that neither Salinas nor he had ever seen Vicentino's book; but it seems that Merseennus was set right in his division by the perusal of Salinas, and that he has made ample amends for his mistake by giving the thirty-one intervals with their ratios as here represented. As to the division of Fabius Columna, it was probably borrowed from this, but it was into thirty-nine sounds and thirty-eight intervals, and will be spoken of hereafter. Vide Merseenn. Harm. Univ. Des Genres de la Musique, Prop. x. xl.

32	C		144000
			lesser semitone
31			138240
			diecis
30			135000
			lesser semitone
29	B		129600
			greater comma
28	B		128000
			lesser semitone
27	la		122880
			lesser comma
26	xa		121500
			greater comma
25	A		120000 [nimum]
			semitonium submi-
24	A		116640
			greater comma
23	xg		115300
			lesser semitone
22	xg		110592
			lesser comma
21	xg		109350
			greater comma
20	G		108000
			lesser semitone
19	G		103680
			greater comma
18	gg		102400
			lesser comma
17	xg		101250
			greater comma
16	xf		100000 [nimum]
			semitonium submi-
15	xf		97200
			greater comma
14	F		96000
			lesser semitone
13	F		92160
			lesser comma
12	fo		91125
			greater comma
11	xe		90000 [nimum]
			semitonium submi-
10	E		87480
			greater comma
9	E		86400
			lesser semitone
8	di		82944
			greater comma
7	xd		81920
			lesser comma
6	xd		81000
			greater comma
5	D		80000 [nimum]
			semitonium submi-
4	D		77760
			greater comma
3	di		76800
			lesser semitone
2	xc		73728
			diecis
1	C		72000

† To understand the nature of this interval, it is necessary to know that of semitones there are many kinds. Merseennus has enumerated them in his Latin work, liber V. De Dissonantia, prop. xiii., but more particularly in his Harmonie Universelle, Des Dissonances, prop. II. pag. 116: they appear to be the Semitonium maximum $\frac{3}{2}$, Semitonium majus $\frac{1}{2}$, Semitonium medium $\frac{1}{2}$, Semitonium Pythagoricum $\frac{2}{3}$, Semitonium minus $\frac{3}{4}$, Semitonium minimum $\frac{4}{5}$, and lastly, the Semitonium subminimum above given, which in its lowest, or radical numbers, will be found to be in the ratio of 250 to 243, for in 120000 the number 480 is found 250 times, and in 116640 it is found 243 times, in 100000 the number 400 is found 250 times, and in 97200 it is found 243 times: in 90000 the number 360 is found 250 times, and in 87480 it is found 243 times. Lastly, in 80000 the number 320 is found 250 times, and in 77760 it is found 243 times. It is to be noted that in the Harmonie Universelle, livre troisième, pag. 167, and in that curious diagram preceding it, the number 87930 is mistaken for 87480. The Semitonium subminimum is an interval less than the chromatic diecis by a comma. Merseenn. Harm., lib. V. prop. ix. Harm. Univ. Des Dissonances, prop. II. pag. 115.

among other things the doctrine of the modes, in the discussing whereof he seems to agree with Glareanus that they are in number twelve, and that they answer to the seven species of diapason harmonically and arithmetically divided; but as the third species proceeding from H is incapable of an harmonical division as wanting a true fifth, and the seventh species proceeding from F is incapable of an arithmetical division as having an excessive fourth, the number of the modes, which would otherwise be fourteen, is reduced to twelve, which is the very position that Glareanus in his Dodecachordon endeavours to demonstrate.

In the tenth chapter is a diagram representing in a collateral view the tetrachords of the ancients conjoined with the hexachords of Guido Aretinus, and showing how the latter spring out of the former. Dr. Wallis has greatly improved upon this in the diagram by him inserted in his Appendix to Ptolemy, and which is given in a former part of this work, exhibiting a comparative view of the ancient Greek system with the scale of Guido.

In the twenty-second chapter he takes notice of the ancient division of the genera into species, but it seems that he did not approve of it, for in his own division of the genera he has rejected it, thereby making that species of each, whatever it be, which he has chosen for an exemplar, a genus of itself.

In the twenty-third chapter he undertakes to show the errors of Aristoxenus in a manner different from Ptolemy and Boetius; and in the five following chapters censures him, and even Ptolemy himself, with a degree of freedom which shews that though he entertained a reverence for the ancients, he was no bigot to their opinions, but assumed the liberty in many instances of thinking and judging for himself.

In the twenty-ninth chapter of the same fourth book he commends in general terms Jacobus Faber Stapulensis, though he seems to suspect that he had never read Ptolemy, nor any other of the Greek harmonicians, and says he does nothing more than demonstrate the propositions of Boetius.

The subsequent chapter contains his opinion of Franchinus and his writings, which he delivers in the following words:—

'Franchinus Gaffurius was a famous professor of theoretical and practical music, and published several works and wrote many things in both parts worthy to be known. He boasts that by his care, and at his expence, the three books of Ptolemy's Harmonics, the three of Aristides Quintilianus, and the three of Manuel Briennius, were translated from the Greek into the Latin. It is true he read those books, as he shows in his works, especially in that which he wrote concerning instrumental harmony, where he recites almost all their positions, but so confusedly, that he seems rather to have read them than understood them. But these Latin translations are not extant as far as I know, perhaps through the avarice of Franchinus himself, who had them made only for his own use, and did not give them to be printed, imagining that a time never would come when the musicians would

'understand the Greek language, and be able to read those authors in the originals. This man had a very good genius, but wanted judgment, for he recited, or rather reckoned up, the positions of these authors, but never examined them in order to find out which was true, or came nearest to the truth, but left them all untouched; and because Boetius was received by all, he dared not to contradict him; and though he seems in some instances to agree with Ptolemy, yet dares he not to assert which of the two he thought the best, but sometimes is drawn on this side, sometimes on that, so that nothing certain or fixed can be had from him: for sometimes, to favour Boetius and the Pythagoreans, he says in that book of music which he wrote in the Italian language, that he wondered at the inadvertency, as he calls it, of Ptolemy, who says that the diapason with the diatessaron is a consonant when it does not answer either to a multiple or superparticular proportion; and a little after, in the same book, he assumes the sesquiquarta and sesquiquinta of Ptolemy, to constitute from them the greater and lesser third, contrary to Boetius and all the Pythagoreans.'

In the thirty-first chapter he delivers his sentiments of Glareanus in these words:—

'Henricus Glareanus was a man excellently versed in all good arts, and has exhibited to the world several specimens of his learning, for he wrote a treatise on Geography, not less useful than concise and clear, which is read in many schools; he also made notes on the Odes of Horace, replete with all kind of erudition; and as to what concerns music, he taught it in three books, according to the rule of the ancient modes, as he himself thinks, which work he entitled *Dodecachordon*. In it he has gathered many examples both of the simple cantus and that of many forms, which at once give great pleasure and profit; and though he never wrote any thing of speculative music, yet he confesses in many places that he had applied himself too much to it, and that he had employed a great deal of time in the study thereof, especially in the reading of Boetius, which he manifestly shows in a preface really long enough, published with that work, in which he mentions that he corrected five books of the music of Boetius, which he says abounded with many errors, and illustrated it with several figures.'

In the thirty-second chapter he considers the speculations of Ludovicus Follianus; and as to his division of the diapason, he says it is the same with that of Ptolemy, called the syntonous, intense, or stretched diatonic, which he says Didymus invented many years ago, with this difference, that Didymus gave to the sesquinal tone the first place in the tetrachord, whereas Ptolemy gives it to the sesquioctave tone. He nevertheless says of the intense diatonic in general, that it is a division of all others the most correct and grateful to the ear. He says that many of the ratios investigated by Follianus had before his time been discovered by Bartholomeus Ramis, a Spaniard, who is blamed by Franchinus for

differing from Boetius. Salinas says that he himself, long before the treatise of Follianus had been read to him, had made many of the discoveries therein contained, and that he had from time to time communicated them to Bartholomeus Escobedus, a man excellently versed in both parts of music, and his very great friend, who told him there was a certain author who had treated of all those things in the same manner as he had thought on, and this author he afterwards found to be Follianus. He blames Follianus for using three semitones, which he calls greater, lesser, and least, when no one else had noticed more than two, and many but one; the greater of the three is in the ratio $\frac{3}{2}$, the lesser $\frac{1}{2}$, and the least $\frac{2}{3}$, the two last he says are well constituted, but the first he condemns as inconcinuous and ungrateful to the ear.

He concludes his remarks on the writings of the modern musicians with a character of Zarlino, of whom he says that he was well skilled in both parts of music, for that as to what regarded the practice, he had been scholar to Adrian Willaert, the most famous symphonist of his time, and succeeded him in his school at Venice; and on the theory of the science he wrote much better than those that went before him.

The remaining three books of Salinas's work are on the subject of the Rhythmus, and are a copious dissertation on the various kinds of metre used by the Greek, the Roman, and, in honour of his own country, the Spanish poets. In the course of his enquiries touching their nature and use, he takes frequent occasion to cite and commend St. Augustine, who also wrote on the subject. The laws of metre have an immediate reference to poetry; but Salinas in a variety of instances shews that they are applicable to music, and that the several kinds of air that occur in the composition of music and of dances, such as the Pavan, the Passamezzo, and others, consist in a regular commixture and interchange of long and short quantities.

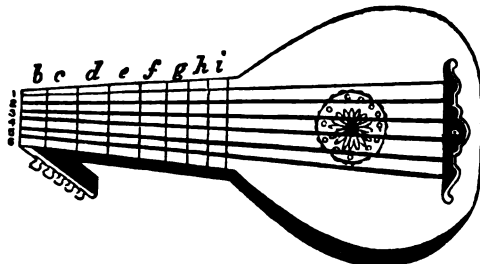
For a character of this valuable work let it suffice to say, that a greater degree of credit is due to it than to almost any other of the kind, the production of modern times, and that for this reason: the author was a practical musician, that is to say an organist, as well as a theorist, and throughout his book he manifests a disposition the farthest removed that can possibly be imagined from that credulity which betrayed Glareanus and some others into error; this disposition led him to enquire into and examine very minutely the doctrines of the Greek writers; and the boldness with which he reprehends them does almost persuade us that when he differs from them the truth is on his side. This seems to be certain, and it is wonderful to consider it, that notwithstanding the ancients were divided in their notions of the genera, and that the enarmonic genus was by much the most difficult to comprehend of them all, Salinas, a man deprived of the faculty of seeing, at the distance of more than two thousand years after it had grown into disuse, investigated and accurately defined it.

BOOK X. CHAP. LXXXVIII.

THE musical characters hitherto spoken of, were calculated not only for vocal performance, but were applicable to every instrument in use after the time of inventing them, excepting the lute, which, for reasons best known to the performers on it, had a series of characters appropriated to that and others of the same class; when or by whom these characters were invented is not known. This kind of notation, which is by certain letters of the Roman alphabet, is called the *Tablature*, the first intimations of which are to be met with in the *Musurgia* of *Ottomarus Luscinius*. The *Fronimo* of *Galilei* is in the title-page called a *Dialogue 'sopra l'Arte del bene in-tavolare:'* this kind of tablature differs from the other, the author, according to the manner of the Italians, as *Mersennus* says, making use of numbers instead of letters, and of straight or hooked lines instead of notes.*

Mersennus says that several skilful men had laboured to improve the *Tablature*, but yet insinuates that they affected to make a mystery of it, from whence he infers that diversity of notation between them. He adds that *Adrian Le Roy* is the only one who has in truth given to the world the precepts of the *Tablature*.† This man was a bookseller at Paris, and wrote the book which *Mersennus* above alludes to, with the title of '*Briefve et facile Instruction 'pour apprendre la Tablature à bien accorder, con- quire, et disposer la Main sur la Guiterne,'* which, together with another book of his of the same kind, intitled '*Instruction de partir toute Musique des huit 'divers Tons en Tablature de Luth,'* were published about 1570, with a recommendatory preface by one *Jacques Gohory*, a musician, and a friend of the author.

This being the first book of the kind ever published, it was esteemed a great curiosity, and as such was immediately on its publication translated into sundry languages; that into the English has only the initials F. K. for the name of the translator, and was printed by *John Kingston* in 1574. The first of these books exhibits the lute in this form:—‡



* De Instrumentis Harmonicis, lib. I. prop. xviii. pag. 24.

† Ibid.

‡ The above figure represents the lute in its original form, but the many improvements made in this instrument make it necessary to remark that the lute, simply constructed as this is, is called the French lute; the first improvement of it was the *Theorbo* or *Cithara Bijuga*, so called as having two necks, the second or longest whereof sustains the four last rows of chords, which give the deepest and gravest sounds; its use is to play thorough bass in the accompaniment of the voice. *Broesard* intimates that it was invented in France by the *Sieur Hotteman*, and thence introduced into Italy. But *Kircher* gives a different account

and represents by the following figure the posture for holding and playing on it:—



The lute which *Le Roy* treats of, is supposed to consist of six strings, or rather eleven, for that the five larger are doubled; and in the *Tablature* the stave of five lines answers to the five upper strings of the instrument, the lower or base string it seems being sufficiently denoted by its proximity to the fifth string, signified by the lowest line of the stave.

The frets come next to be explained: these are small strings tied about the neck of the lute at proper distances, eight in number, and figured by the letters b c d e f g h i;§ the letter a is omitted in the above series, forasmuch as wherever it is found the string is to be struck open. The general idea of the tablature therefore is this, the lines of the stave give the chords respectively, and the letters the points at which they are to be stopped, and consequently the notes of any given composition, the instrument being previously tuned for the purpose, as the precepts of the lute require.

As to the characters for time used in the tablature,

of the matter, saying that it received its name from a certain Neapolitan who first doubled the neck of the *Testudo* or lute, and added several chords to it. He says that the author of this improvement, with a kind of pun, gave to this instrument the name of *Tiorba*, from its near resemblance to a utensil so called, in which the gloves of Italy were wont, as in a mortar, to pound perfumes. *Kircher* adds, that *Hieronymus Kapsberger*, a noble German, was the first that brought the *Theorbo* into repute, and that in his time it had the preference of all other instruments.

The strings of the *Theorbo*, properly so called, are single, nevertheless there are many who double the bass strings with an octave, and the small ones with an unison, in which case it assumes a new appellation, and is called the *Arch-lute*. *Mersennus* is extremely accurate in his description of the lute and the *Theorbo*, but he has not noted the diversity between the latter and the *Arch-lute*.

§ It seems that the use of the small letters of the alphabet in tablature was at first peculiar to the French. The Italians and other nations instead thereof making use of cyphers and other characters. *Le Roy*, pag. 64. But the French method, soon after the publication of *Le Roy's* book, became general.

they were of this form $\uparrow \uparrow \uparrow$ answering to the minim, the crotchet, and the quaver, and placed over the stave in the manner represented in the subsequent example.

The other tract, intitled 'Instruction de partir toute Musique des huit divers Tons en Tablature de Luth,' directs the method of setting music al-

ready composed in proper notes in tablature for the lute; and contains a great variety of examples chosen out of the works of Orlando de Lasso;* the following, which is the first strain only of a song of his, beginning 'Quand mon Mary vient de dehors,' in four parts with the Tablature, may serve as a specimen of this kind of notation:—†

The image displays a musical score for a four-part setting of a song by Orlando de Lasso. The score is written on four staves, each with a different clef (treble, alto, tenor, and bass). Below the staves, there is a line of lute tablature consisting of letters (a, b, c, d, e, f) and rhythmic markings (vertical strokes with flags). The tablature is aligned with the musical notes, indicating the fret positions and rhythms for the lute. The music is in a common time signature (C) and features various note values including minims, crotchets, and quavers. The tablature includes dynamic markings such as 'f' (forte) and 'c' (crescendo).

The ninth and last chapter of this latter book of Le Roy is on the subject of strings, concerning which there is much curious matter in Mersennus, as also a rule for trying them, and distinguishing between a true and a false string: but because this rule is

* Gobory, in his preface to Le Roy's book, sums up the character of Orlando de Lasso in those words: 'Here then will I end, after I have advertised you that all the examples of this book be taken and chosen out of Orlando de Lasso, of whom I will further witness, that he is this day, without danger of offence to any man, esteemed the most excellent musician of this time, as well in grave matters, as meane and more pleasant; a thing given from above to fewe other, in which he hath attained not only the perfection of melodie, but also a certaine grace of sound beyond all other, such as Appelles did accompt of Venus portraiture; wherein he hath more than all other observed to fit the harmony to the matter, expressing all partes of the passions thereof: being the first that hath eschewed bondes and common holdings of the letter, by right placing of the sillabellies upon the notes, and observing the accent in French, and quantitie in Latine.'

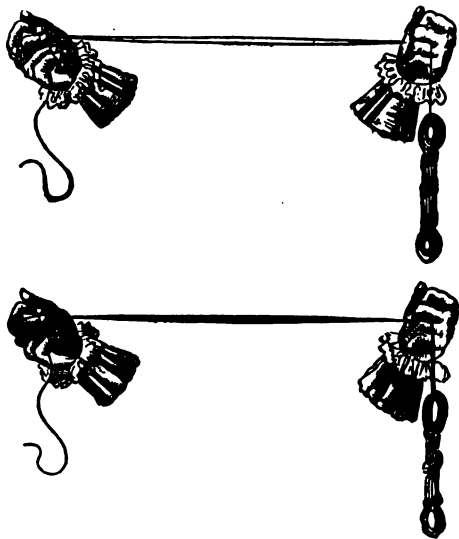
† It seems that the method of notation by the tablature was also

also to be found in Le Roy's book, and most probably was by Mersennus taken from thence, the whole of the chapter, which is very short, is here inserted.

To put the laste hande to this worke, I will not omitte to give you to understande how to

adapted to the Viol de Gamba. In the second book of Songs or Ayres with Tablature, by John Dowland, printed in 1600, is a lesson in tablature for the lute and bass viol, entitled Dowland's Adew for Master Oliver Cromwell; and in a book printed in 1603, entitled The Schoole of Musicke, by Thomas Robinson, lutenist, is a song for the viol by tablature. Nay, it was also used for the treble violin, and that so late as 1682; and, which is very remarkable, there were then two ways of tuning it, at the choice of the performer, by fifths and by eighths: this appears in a book entitled Apollo's Banquet, containing Instructions and Variety of new tunes, Ayres, and Jiggs, for the treble Violin, the third edition published in that year by John Playford. Anthony Wood, who loved and understood music, also played on the violin; and, as he himself relates, practised a still different method of tuning, viz., by fourths. Vide Life of Antony a Wood, at the end of Hearne's Call Vindictæ, and lately reprinted by itself.

knowe stringes, whereof the best come to us out of Almaine, on this side the town of Munic, and from Aquila in Italie; before we put them on the lute it is nedefull to prove them between the handes in maner as is sette forth in the figures hereafter pictured, which shewe manifestlie on the finger and to the eye the difference from the true with the false; that is to wete, the true is knowen by this, that in strikyng hym betwene the fingers hee muste shewe to divide hymselfe juste in twoo, and that for so muche as shall reche from the bridge belowe to the toppe of the necke, because it maketh no matter for the rest of the stringes that goeth among the pinnes; notwithstanding ye maie not be satisfied in assaiying the stringe holden only at that length, but that you must also prove hym in stryking hym, treying holden at shorter lengthes to be well assured of his certaine goodness and perfection. Also the false stryng is knowen by the shew of many strynges, which it representeth when it is stricken between the fingers; so muste you continewe the same triall in stryking the stryng till you perceive the tooke of the good to separate hym from the hadde, accordyng to the figures followinge.



COSTANZO PORTA, a Franciscan friar, and a native of Cremona, is highly celebrated among the musicians of the sixteenth century. In the earlier part of his life he was Maestro di Capella in the cathedral church of Osimo as it is called, from the Latin Auximum, a small city on the river Musone near Ancona, but was afterwards advanced to the same station in the church of Loretto. He was the author of that most ingenious composition published first by Artusi in his treatise 'Delle Imperfettioni della moderna Musica,' and inserted in the earlier part of this work, and which is so contrived, as that besides that the parts are inverted, it may be sung as well backward as forward. He is supposed to have died in the year 1580, and has left behind him Motets for five voices, printed at Venice in 1546, and other works of the like kind, printed also there in 1566 and 1580. In an oration pronounced by Ansaldo

Cotta of Cremona in 1553, 'pro Instauratione Studiorum Cremonæ,' is the following eulogium on him: Constantius Porta non tam hujus urbis, quam Franciscanæ familiæ decus eximium, cujus in musica facultatem præstantiam plerisque cum Italiæ urbibus Roma potissimum, omnium regina gentium est admirata. Vide Arisii Cremonam literatam, pag. 453. And elsewhere in the same oration he is styled 'Musicorum omnium præter invidiam facile princeps.' Vide Draudii Bibl. Class. pag. 1693.

GIOVANNI PIERLUIGI DA PALESTRINA (*a Portrait*) was, as his name imports, a native of the ancient Præneste, now corruptly called Palestrina, and still more corruptly Palestina.* He flourished in the middle of the sixteenth century; and the year of his birth is thus ascertained by Andrea Adami da Bolsena, master of the pontifical chapel under Clement XI. who professes to give the particulars of his life. 'The time of Palestrina's birth is not precisely to be ascertained, by reason that the records of the city of Palestrina, which may be supposed to contain the register of his birth, were destroyed at the sacking thereof by the duke d'Alva in 1557; but it appears by a book intitled *Le grotte Vaticane*, written by a person named Torrigio, that he was in the sixty-fifth year of his age when he died;' and from other authentic evidences the same writer, Adami, fixes the time of his death on the second day of February 1594, from whence it may be computed that he must have been born some time in the year 1529.†

The author who has enabled us thus satisfactorily to settle the period of Palestrina's life, has been less fortunate in ascertaining the name of his master. He says that he was a scholar of Gaudio Mell, Fiammengo, i. e. a Fleming, or native of Flanders; this assertion is grounded on the testimony of Antimo Liberati, a singer in the pontifical chapel, who has given an account of Palestrina and his supposed master in these words:—

'Among the many strangers who settled in Italy and Rome, the first who gave instructions for singing and harmonic modulations was Gaudio Mell, Flandro, a man of great talents, and of a sweet flowing style, who instituted at Rome a noble and excellent school for music, where many pupils rendered themselves conspicuous in that science, but above all Gio. Pier Luigi Palestrina, who, as if distinguished by nature herself, surpassed all other

* The name Gianetto Palestina occurs in many collections of madrigals and other compositions published about this time; and in the *Storia della Musica* of Padre Martini, pag. 108, is the following note: 'Giovanni Pier Luigi da Palestrina detto anche Gianetto da Palestrina come dal lib. I. intitolato *Li Amorevoli Ardori di diversi eccell. Musici a 5. raccolti da Cesare Corradi*.'

The truth of this assertion, notwithstanding the authority on which it is grounded, is at least questionable. In a collection of madrigals, intitled *Medodia Olympica*, published by Pietro Philippi in 1594, we meet with the name Gio. Prenestini to the madrigals, 'Mori quasi il mio Core,' and 'Veramente in amore;' and also with the name Gianetto Palestina to 'Non son le vostri mani,' and 'O bella Ninfa.' And in a collection of motets intitled 'Florilegium sacrarum cantionum quibque vocum pre diebus Dominicis et Festis totius anni celeberrimis nostri temporis musicis,' printed by Petrus Phalesius of Antwerp in 1611, the name Jo. Aloysius Prænestinus occurs in seven places, and that of Gianetto de Palestina in four.

The argument hence arising is, that if both those names were intended to denote the same person, the distinction between them would hardly have been preserved in the instances above adduced in one and the same publication.

† Vide Osservazioni per ben regolare il Coro della Cappella Pontificia, fatte da Andrea Adami da Bolsena, pag. 169.

rivals, and even his own masters. This great genius, 'guided by a peculiar faculty, the gift of God, adopted 'a style of harmony so elegant, so noble, so learned, 'so easy, and so pleasing both to the connoisseur and 'the ignorant, that in a mass composed on purpose, 'sung before pope Marcellus Cervinus and the sacred 'college of cardinals, he made that pontiff alter the 'intention he had of enforcing the bull of John 'XXII. which abolished entirely church-music under 'the penalty of excommunication. This ingenious 'man, by his astonishing skill and the divine melody 'of that mass, plainly convinced his holiness that 'those disagreeable jars between the music and the 'words so often heard in churches, were not owing 'to any defect in the art, but to the want of skill in 'the composers; and Paul IV. his successor, to whom 'he dedicated the mass entitled *Missæ Papæ Marcelli*, 'appointed him perpetual composer and director in 'the pontifical chapel,* a dignity which has been 'vacant ever since his death.† This mass is now 'and ever will be performed, as long as there is 'a world, in the sacred temples at Rome, and in all 'other places where they have been so fortunate as 'to procure the compositions of a genius whose 'works breathe divine harmony, and enable us to 'sing in a style so truly sublime the praises of our 'Maker.‡

Adami has adopted the facts contained in this relation, and acquiesced in the assertion that Gaudio Mell, a Fleming, was the master of a noble school at Rome, where the principles and practice of music were taught, and that Palestrina was his disciple.

It is to be feared that Liberati had no better authority for the particulars of his relation than bare report, for evidence is wanting that such a person as Gaudio Mell, a Fleming and musician, ever existed: his name does not occur in the list of Flemish musicians given by Guicciardini in his *History of the Low Countries*, nor in any of those collections of vocal music published by Pietro Phalesio, Hubert Waelrant, Andrew Pevernage, Pietro Philippi, Melchior Borchgrevinck, and others, between the years 1593 and 1620, nor in Printz's *History of Music*, nor in that of Bontempi, nor in the *Musical Lexicon* of John Godfrey Walther, which contains an accurate account of musicians from the time of Pythagoras down to the year 1732.

It may indeed be suspected that Liberati by Gaudio Mell might understand Goudimel, but his Christian name was Claude, for which reason he is by Monsieur Varillas confounded with Claude Le Jeune. Neither

* Paul IV. succeeded to the pontificate in 1559, and at that time Girolamo Maccaioni was *Maestro della Cappella Pontificia*; and in 1567 he was succeeded by Egidio Valentini, these were both ecclesiastics, and not musicians, and the latter is styled '*Maestro del Collegio de Cantoria della Cappella Pontificia*,' from whence it may be conjectured that this was an office that referred to the government of the college, and not to the performance of service in the chapel; so that by this appointment Palestrina seems to have been virtually *Maestro di Cappella*, as well of the pope's chapel as of the church of St. Peter, but that he did not choose to assume the title, it having been already appropriated to an officer of a different kind.

† This is a mistake of Antimo Liberati, and is noted by Adami, for Felice Anerio succeeded Palestrina in the office of *Compositore da Cappella Pontificia* immediately on his decease, as appears by a memorandum in a book of Ippolito Gambocci, *Puntatore*, i. e. register of the college, or as some say, an officer whose duty it is to appoint the functions for each day's service in the chapel. See the account of Felice Anerio hereafter given.

‡ Lettera scritta dal Sig. Antimo Liberati in risposta ad una del Sig. Ovidio Fersapègi, 1686, pag. 22.

was Goudimel a Fleming, but a native of Franche Comté, as Bayle infers from certain verses which fix the place of his birth upon the Doux, a river that runs by Bezançon; and Franche Comté is not in Flanders, but in Burgundy.§

But besides that the master of Palestrina is said to have been a Fleming, there are other reasons for supposing that Goudimel was not the person. Goudimel was a protestant, and, as Thuanus relates, set the Psalms of David translated into metre by Clement Marot and Theodore Beza, to various and most pleasing tunes, which in his time were sung both publicly and privately by the protestants. He was massacred at Lyons, and not at Paris, as some assert, in 1572, and has a place and an eulogium in the protestant martyrology.||

After stating the above facts it must appear needless to insist on the improbability that Palestrina, whom we must suppose to have been born of parents of the Romish communion, should have ever been the disciple of a protestant, an intimate of Calvin, and a composer of the music to a translation of the Psalms into vernacular metre; and who, so far was he from having instituted a music-school at Rome, as is elsewhere asserted, does not appear by any of the accounts extant of him to have past the limits of his own country.

For these reasons it may be presumed that Liberati is mistaken in the name of Palestrina's master, who though in truth a Fleming, and of the name of Mell, seems to have been a different person from him whom he has dignified with that character. In a word, the current tradition is, and Dr. Pepusch himself acquiesced in it, that Palestrina was a disciple of Rinaldo del Mell [Renatus de Mell] a well-known composer in the sixteenth century, who is described by Printz and Walther as being a native of Flanders, and to have flourished about the year 1538, at which time Palestrina was nine years old, a proper age for instruction.

At the age of thirty-three, and in the year 1562, Palestrina was made *Maestro di Cappella di S. Maria Maggiore*, and in 1571 he was appointed to the same honourable office in the church of St. Peter at Rome, in the room of Giovanni Animuccia, which he held for the remainder of his life, honoured with the favour and protection of the succeeding popes, particularly Sixtus V.

Antimo Liberati relates that Palestrina, in conjunction with a very intimate friend and fellow-student [*condiscipolo*] of his, Gio. Maria Nanino by name, established a school at Rome, in which, notwithstanding his close attachment to his studies and the duties of his employment, the former often appeared assisting the students in their exercises, and deciding the differences which sometimes arose between the professors that frequented it.

In the course of his studies Palestrina discovered the error of the German and other musicians, who had in a great measure corrupted the practice of music by the introduction of intricate proportions, and set about framing a style for the church, grave, decent, and plain, and which, as it admitted of none

§ Vide Bayle in art. GOUDIMEL.

|| Ibid.

of those unnatural commixtures of dissimilar times, which were become the disgrace of music, left ample scope for invention. Influenced by that love of simplicity which is discoverable in all his works, he, in conjunction with Francesco Soriano, reduced the measures in the Cantus Ecclesiasticus to three, namely the Long, the Breve, and the Semibreve.*

Of many works which Palestrina composed, one

* Vide Il Canto Ecclesiastico da D. Marzio Erculeo. In Modano, 1686, pag. 3.

of the most capital is his *Masses*, published at Rome in 1572, in large folio, with this title, 'Joannis Petri Loysii Prænестini in Basilica S. Petri de urbe cappellæ magistri missarum, liber primus,' under which is a curious print from wood or metal after the design of some great painter, as must be inferred from the excellence of the drawing, representing the author making an offering of his book to the pope in the manner here exhibited :—



On the back of the title-page is a short commendatory epistle to Julius III. the then pope. Of these masses, which are five in number, and it is to be doubted whether Palestrina ever published any more in this form, four are for four voices, and one for five. Many parts of each are composed in canon, and bespeak the learning and ingenuity of their author. The masses are printed in parts, on a coarse but very legible type, with Gothic initial letters curiously designed and executed.*

There are also extant of his composition Motets and Hymns for 4, 5, and 6 voices, printed in large folio, and published in 1589; some of these motets were also printed in a collection intitled 'Florilegium

'sacrarum cationum quinque vocum pro diebus 'dominicis et festis totius anni, e celeberrimis nostri 'temporis musicis.' This collection was given to the world in 1609 by Petrus Phalesius, a printer of Antwerp, who was a man of learning, and, as it should seem, a lover of music, for he published many other collections of music, and before his house had the sign of king David playing on the harp. It is in the motets of Palestrina that we discover that grandeur and dignity of style, that artful modulation and sweet interchange of new and original harmonies, for which he is so justly celebrated; with respect to these excellencies let the following composition speak for him:—

SI - - CUT cer - vus de - si - de - rat ad
 SI - - CUT cer - vus de - si - de - rat ad fon - tes a - qua -
 SI - CUT cer - vus de - si - de - rat ad fon - tes a - qua - - - rum,
 SI - - CUT
 fon - tes a - qua - - - rum,
 rum, si - cut cer - vus de - si - de - rat ad . . .
 si - - cut cer - vus de - si - de - rat ad fon - tes a - - - qua - -
 cer - vus de - si - de - rat ad fon - tes a - qua - rum, si - - cut cer -
 si - - cut cer - vus de - si - de - rat ad fon - tes a - qua -
 fon - tes a - qua - rum, de - si - de - rat ad fon - tes a - qua -
 rum, . . . de - si - de - rat ad fon - tes . . . a -
 - vus de - si - de - rat ad fon - tes, de - si - de - rat . . . ad fon - tes a - qua -
 rum, i - - ta de - si -
 rum, i - - ta de -
 - qua - rum, i - - ta de - si - de - rat, . . . i -
 - rum, i - - ta de - si - de - rat, . . .

* The art of printing music in letter-press or on metal types, was at this time arrived at great perfection, it was invented by one Ottavio de Petrucci of Pescombrone in Italy, who in the year 1515 and 1516

published the masses of Iodocus Præstensis. Osserv. da Andrea Adami, pag. 160. And in France it was improved by Pierre Ballard, as appears by the works of Claude le Jeune, published by him.

de - rat, i - ta de - si -
 si - de - rat, i - ta, . . . i -
 ta de - si - de - rat, i - ta de - si - de - rat, i - ta de - si - de - rat,
 i - ta de - si - de - rat,

de - rat . . . a - ni - ma me - a
 ta de - si - de - rat, . . . a - ni - ma me - a . . .
 i - ta de - si - de - rat, a - ni -
 i - ta de - si - de - rat, de - si - de - rat, .

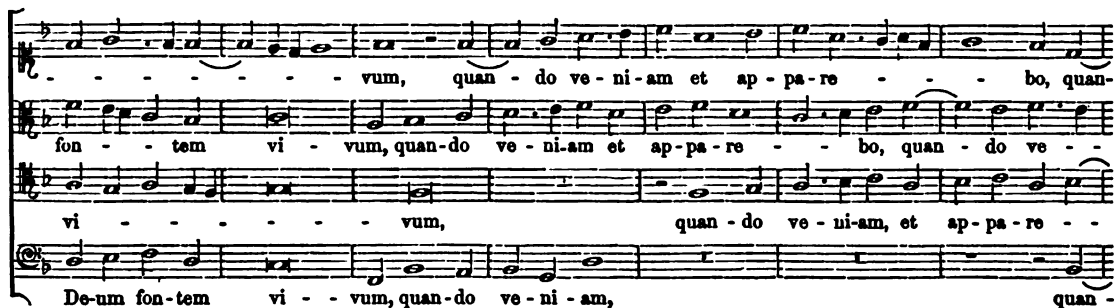
ad te De - us, a - ni - ma me -
 . . . ad te De - us, a - ni - ma me - a ad . te De -
 - ma me - a ad te De - us,
 . . . a - ni - ma me - a ad te De - us, a - ni - ma

a ad te De - us.
 us, . . . ad . te De - us, ad te De - us.
 a - ni - ma me - a ad te De - us, ad te De - us.
 me - a ad te . . . De - us, ad te De - us.

Si - ti - vit a - ni - ma me - a ad De - um fon - tem vi - vum, a -
 Si - ti - vit a - ni - ma me - a . . . ad De - um fon - tem vi - vum, a -
 Si - ti - vit a - ni - ma me -
 Si - ti -



ni - ma me - a . . . ad De-um fontem vi - vum, ad Deum fon-tem vi -
 - ni-ma . . . me - a, si - ti - vit a - nima me - a ad Deum
 - a ad De-um fon - tem vi - vum, ad De - um fontem
 - vit a - nima me - a ad De-um fon-tem vi - vum, ad



- vum, quan - do ve - ni-am et ap - pa-re - bo, quan-
 fon - tem vi - vum, quan-do ve - ni-am et ap - pa-re - bo, quan - do ve -
 vi - vum, quan - do ve - ni-am, et ap - pa-re -
 De-um fon-tem vi - vum, quan-do ve - ni - am, quan -



- do ve - ni - am et ap - pa - re - bo, an - te fa - ci-em De -
 - ni - am et ap - pa - re - bo, an - te fa - ci-em . . .
 - bo, et ap - pa - re - bo, . . . an - te fa - ci-em
 - do ve - ni - am et ap - pa - re - bo,



- i, an - te fa - ci-em De - i, fu - e-runt mi - hi .
 De - i, an - te fa - ci-em De - i fu - e-runt mi - hi . . . La -
 De - i, an - te fa - ci-em De - i fu - e-runt mi -
 an - te fa - ci-em De - i fu - e-runt mi - hi.



La - cry - m - e me - e pa - nes, Di - e ac
 - cry - m - e me - e pa - nes, Di - e ac
 hi. La - cry - m - e me - e pa - nes, Di - e ac
 La - cry - m - e me - e pa - nes, Di - e ac

noe - - te dum di - ci-tur mi - hi quo-ti - di - e, u - bi est De - us tu - -
 - - - te dum di - ci-tur mi - hi quo-ti - di - e, quo-ti - di - e, u - bi est De - us
 noe - te dum di - ci - tur mi - hi quo-ti - di - e, quo-ti - di - e, u - bi est De - us
 noe - - te dum di - ci-tur mi - hi quo-ti - di - e, u - bi est De - us
 - - - us, dum di - ci - tur mi -
 tu - - - us, u - bi est De - us tu - - - us, dum di - ci - tur
 tu - - - us, u - bi est De - us tu - - - us, dum di - ci - tur
 quo - ti - di - e u - bi est De - us tu - us, De - us tu - - us, dum di - ci - tar
 - hi quo - ti - di - e, u - bi est De - us tu - - - us.
 mi - hi quo - ti - di - e, u - bi est De - us tu - - us.
 mi - hi quo - ti di - e, u - bi est De - us tu - - - us.
 mi - hi quo - ti di - e, u - - bi est De - us tu - us, De - us tu - - us.

GIO. PIERLUIGI DA PALESTRINA.

Dr. Aldrich adapted English words, that is to say part of the sixty-third psalm, 'O God, thou art my God,' to the music of this motet, and it is frequently sung in our cathedrals as an anthem, as is also another of Palestrina, beginning 'Doctor Bonus,' to the words 'We have heard with our ears, O Lord,' these are remarkable instances of that faculty which Dr. Aldrich possessed of naturalizing as it were the compositions of the old Italian masters, and accommodating them to an English ear, by words perhaps as well suited to the music as those to which they were originally framed.

Blean, in his *Admiranda Italia*, part II. pag. 312, relates that at the erection of the famous antique obelisk near the Vatican in 1586, Palestrina on the twenty-seventh day of September in that year, with eighteen choral singers, assisted in celebrating that stupendous work, which at this day does honour to the pontificate of Sixtus V.

Kircher, in the *Musurgia*, tom. I. lib. VII. cap. v. has given a Crucifixus of Palestrina, which he says is

deservedly the admiration of all musicians, as being the work of a most exquisite genius. Many of the masses of Palestrina are strict canon, a species of composition which he thoroughly understood, but his motets are in general fugues, in which it is hard to say whether the grandeur and sublimity of the point, or the close texture of the harmony is most to be admired. As to the points or subjects of his fugues, though consisting in general of but few bars, nay, sometimes of no greater a number of notes than are usually contained in a bar, they were assumed as themes or subjects for other compositions, and this not by young students, but by masters of the first eminence. Numberless are the instances to be met with of compositions of this kind, but some of the most remarkable are contained in a work of Abbate Domenico dal Pane, a sopranist of the pontifical chapel, published in 1687, intitled 'Messe a quattro, cinque, sei, et otto voci, estratte da esquisiti motetti del Palestrina,' these are seven masses, of which seven motets of Palestrina, namely, Doctor bonus,

Domine quando veneris, Stella quam viderant Magi, O Beatum virum, Jubilate Deo, Canite tuba in Sion, Fratres ego enim accepi, are severally the theme.

The superior excellence of these compositions, it seems, excited in the contemporary musicians both admiration and envy. Johannes Hieronymus Kapeberger, a German, made an attempt on the reputation of Palestrina, which succeeded as it deserved. Kapeberger, who is represented by Doni as a man of great assurance and volubility of tongue, by the assistance of a friend procured admission to a certain bishop, to whom he insinuated that the compositions of Palestrina usually sung in the episcopal palace were rude and inelegant in respect to the melody and harmony, and that the repetition of the same words, but more especially of the same point or musical subject, in short, that which constitutes a fugue in one and the same cantus, detracted from the merit of the composition. The bishop, who seems to have been a weak man, listened with attention to a proposal of Kapeberger, which meant nothing less than the banishing from his chapel the music of Palestrina, and admitting that of his opponent in his stead; Kapeberger succeeded, and his music was given to the singers of the bishop's chapel; they at first refused, but were at length compelled to sing it, but they did

it in such a manner as soon induced him to desist from his attempt, and wisely decline a competition in which he had not the least chance of success. Kapeberger was a voluminous composer; he excelled all of his time in playing on the Theorbo, an instrument which he had greatly improved and brought into repute, and is represented by Kircher as a person of great abilities; the character he gives of him is, that he was an excellent performer on most instruments, a man noble by birth, and of great reputation for prudence and learning; in this he differs widely from Doni, but it seems that Kircher had received great assistance from Kapeberger while he was writing the *Musurgia*.

Palestrina seems to have devoted his whole attention to the duties of his station, for the improvement of the church style was the great object of his studies; nevertheless he composed a few madrigals, which have been preserved and are published.

In the year 1594 he published 'Madrigali Spirituali a cinque voci,' dedicated to a patroness of his, the grand duchess of Tuscany; the style of these compositions is remarkably chaste and pathetic, the words are Italian, and purport to be hymns and penitential songs to the number of thirty.* The following is the ninth of them:—

CRE-DO gen - til da - gli a - mo - ro - si ver - -

CRE-DO gen - til . . . da - gli a - mo - ro - si

CRE-DO gen - til . . . da - gli a - mo - ro - si ver - - mi

CRE - DO gen - til . . . da - gli a - mo - ro - si ver - mi da -

CRE - DO gen - til . . . da - gli a - mo -

mi d'ogn'u - ma - no pen - sier pur - gam'il co - - - re,

ver - mi d'ogn' . . u - ma - no pensier pur - gam'il co - re, purgam'il co - re per -

d'ogn'u - ma - no pen - sier pur - gam'il co - re, il co - - - re per -

gli a - mo - ro - si ver - mi d'ogn'u - ma - no pen - sier pur - gam'il co - re per -

ro - si ver - mi d'ogn'u - ma - no pen - sier . . . pur - ga - mi'l co - re per -

* The dedication of the book is thus dated: 'Di Roma il primo giorno del anno 1594,' from whence it may be collected that this was his last

work, and that it was published just a month before his decease, for he died on the second day of February in that year.

per-che da te ques - ti ca - duchi in - fir - mi
 - ché da te ques - ti ca - duchi in - fir - mi ques - ti ca - du - chi in - fir - mi
 - ché da te . . . ques - ti ca - duchi in - fir - mi sen -
 - ché da te . . . ques - ti ca - duchi in - fir - mi, ques - ti ca - du - chi in fir - mi
 - ché da te qu - es - - ti, da te ques - ti ca - duchi in - fir - mi

sen - si pren - dano ogn'or vi - tae vi - go - - re tu vi - va Pal -
 sen - si pren - dano ogn'or vi - tae, vi - tae, vi - go - re tu vi - va Pal - ma a -
 - si pren - dano ogn' or vi - tae . . . vi - go - re tu vi - va Pal -
 sen - si pren - dano ogn'or vi - tae vi - go - re
 sen - si pren - da - no ogn' or vi - tae vi - go - re

- ma a me - - a me sta - bi - lie fer - mi Gior - ni non fat - ti
 - - me, a - - me sta - bi - lie fer - mi Gior - ni non fat - ti
 - - ma a - me sta - bi - lie fer - mi Gior - ni non fat - ti
 tu vi - va Pal - ma me sta - bi - lie fer - mi Gior - ni non fat - ti
 tu vi - va Pal - ma me sta - bi - lie fer - mi Gior - ni non fat - ti

dal vo - lar - de l'hore. Con - ce di dio l'uo - mo neg -
 dal vo - lar - de l'hore. Con - ce di dio l'uo - mo neg - let - to e fra -
 dal vo - lar - de l'hore. Con - ce di di - - o l'uo - mo neg - let - to e fra -
 dal vo - lar - de l'hore. Con - ce di dio l'uo - mo neg - let - to e fra - le, l'uo - mo neg - let - to e
 dal vo - lar - de l'hore. Con - ce di dio l'uo - mo neg - let - to e fra - le l'uo - mo neg -

le - tto e fra - le vi - va te - co nel Ciel sempr'im - mor - ta - le
 - le vi - va te - co nel Ciel sempr'immor - ta - le vi - va te - co nel, Ciel sempr'immor -
 le e, fra - le vi - va te - co nel Ciel sempr'im - mor - ta - le, sempr'im - mor - ta -
 frale, fra - le vi - va te - co nel Ciel sempr'im - mor -
 - letto e fra - le vi - va te - co - nel Ciel sempr'immor -

vi - va te - co nel ciel sempr'im - mor - ta - le sempr'immorta - le.
 - ta vi - va te - co nel ciel sempr'immor - ta - le, sempr'im - mor - ta - le.
 - le vi - va te - co nel ciel, nel ciel sempr'im - mor - ta - le.
 - ta - le vi - va te - co nel ciel sempr'im - mor - ta - le.
 - ta - le vi - va te - co nel ciel sempr'im - mor - ta - le.

GIO. PIERLUIGI DA PALESTRINA.

How long Palestrina enjoyed the honourable employment of Maestro di Capella in the church of St. Peter at Rome is above ascertained, by the year of his appointment and that of his death. His historian has in the way of his function mentioned some particulars relative to that event; he says that his funeral was attended not only by all the musicians of Rome, but by a multitude of the people, and was celebrated by three choirs, who sang a 'Libera me, Domine,' in five parts, of his own composition; that his body was interred in the church of St. Peter, before the altar of St. Simon and St. Jude, a privilege due to the merit of so great a man, inclosed in a sheet of lead, with this inscription, 'Petrus Aloysius Prænestinus Musicæ Princeps.' It is said that an original picture of him is yet extant in the archives of the pope's chapel, and it is probable that the portrait which Adami has given of him is taken from it. By this, which conveys the idea of a man remarkably mean in his appearance, it seems that his bodily endowments bore no proportion to those of his mind.

To enumerate the testimonies of authors in favour of Palestrina would be an endless task. John Baptist Doni before-mentioned, a profoundly learned musician, and whose partiality for the music of the ancients would hardly suffer him to admire that of the moderns, seems without hesitation to acquiesce in the general opinion that he was the greatest man in his time. Agostina Pisa, in a treatise intitled 'Battuta della Musica di-

chiarata,' printed at Rome in 1611, pag. 87, calls him the honour of music, and prince of musicians. He elsewhere styles him 'Gian Pietro Aloisio Palestina luce et splendore della musica.' Giovanni Maria Bononcini also calls him 'Principe de musica,' as does Angelo Berardi, a very sensible and intelligent writer; this latter also styles him the father of music, and as such he is in general considered by all that take occasion to speak of him.

The following catalogue is exhibited for the use of such as may be desirous of collecting the works of this great man: 'Dodici libri di messe a 4, 5, 6, 8 voci, stamp. in Roma, ed. in Venet. 1554, 1567, 1570, 1572, 1582, 1585, 1590, 1591, 1594, 1599, 1600, 1601. Due libri d' Offertorii a 5, Ven. 1594. Due libri di Motetti a 4, Ven. 1571, 1606. Quattro libri di Motetti a 5, 6, 7, 8 voci, Ven. 1575, 1580, 1584, 1586. Magnificat 8 tonum, Romæ. 1591. Hymni totius anni 4 voc. Romæ et Ven. 1589. Due libri di madrig. a 4 voci, Ven. 1586, 1605. Due libri di madrig. a 5 voci, Ven. 1594. Litanie a 4, Ven. 1600.

CHAP. LXXXIX.

GIOVANNI MARIA NANINO, (*a Portrait,*) a disciple or fellow-student of Palestrina, having been brought up under the same master, namely, Rinaldo del Mell, was a native of Vallerano, and in 1577 was appointed a singer in the pontifical chapel, where are

preserved many excellent compositions of his. He became afterwards Maestro di Cappella di S. Maria Maggiore, and was probably the immediate successor of Palestrina in that office. Some very fine madrigals composed by him are to be found in the collections published by Andrew Pevernage, Pietro Phalesio, Hubert Waelrant, Pietro Philippi, and others, with the titles of *Harmonia Celeste*, *Musica Divina*, *Symphonia Angelica*, and *Melodia Olympica*. Padre Martini, in the catalogue of authors at the end of his *Storia della Musica*, tom. I., takes notice of two manuscripts of his that are extant, the one entitled 'Cen-
'tocinquantesette Contrapunte e Canonici a 2, 3, 4, 5, 6, 7, 8, 11 voci sopra del Canto fermo intitolato la 'Base di Costanzo Festa'; the other, 'Trattato di Contrapunto con la Regola per far Contrapunto a mente di Gio. Maria, e Bernardino Nanino suo nipote.' Sebastian Raval, a Spaniard, and a celebrated contrapuntist, was foiled by him in a competition between them which was the abler composer.

It has already been mentioned that Nanino, in conjunction with his friend Palestrina, established at Rome a school for the study of music. Antimo Liberata, who relates this fact, intimates that this seminary was frequented by many eminent professors of the science, who resorted thither for improvement; and that Palestrina, besides taking his part in the instruction of the youth, was a moderator in the disputes that sometimes arose among them. The same author adds, that among the many excellent musicians that were there educated, Bernardino Nanino, a younger brother of him of whom we are now speaking, was distinguished as a wonderful genius, and as having improved music by the introduction of a new and original style; there is nevertheless nothing extant of his composition but a work printed at Rome in 1620, entitled 'Salmi a 4 voci per le Domeniche, Solennita della Madonna et Apostoli con doi Magnificat, uno a 4 e l' altro a 8 voci.' Antonio Cifra was also a disciple in this school.

FELICE ANERIO, (*a Portrait*), a disciple of the elder Nanino, was the immediate successor of Palestrina in the station of composer to the pontifical chapel.* He had the character of an excellent contrapuntist; many of his compositions are preserved in the library of the chapel, and there is extant a valuable collection of madrigals by him, printed at Antwerp in 1610.

RUGGIERO GIOVANELLI (*a Portrait*), was master of the chapels of St. Lewis and St. Apollinare, and the immediate successor of Palestrina in the church of St. Peter at Rome;† and also a singer in the

pontifical chapel: a collection of madrigals by him, printed at Venice, is extant; he composed also many masses, amongst which is one for eight voices, called 'Vestiva i colli,' taken from a madrigal with those initial words of Gianetto Palestrina, which is much celebrated.

In the year 1581 a book appeared in the world with this silly title, 'Il tesoro illuminato, di tutti i tuoni di Canto figurato, con alcuni bellissimi secreti non da altri più scritti: nuovamente composto dal R. P. frate illuminato Aijguino Bresciano, dell' ordine serafico d' osservanza.' Notwithstanding the very emphatical title of this book, it contains very little worthy the attention of a curious reader. The author is lavish in the praises of Marchettus of Padua, and Spataro, and of his irrefragable master Peter Aron, whose name he never mentions without that extravagant epithet.

About this time lived PIETRO PONTIO of Parma; he composed and published, about the year 1580, three books of masses. He was the author, also, of a book with the following title, 'Ragionamento di Musica del Rev. M. Don Pietro Pontio Parmegiano, ove si tratta de' passaggi della consonantie e dissonantie, buoni e non buoni; e del modo di far Motetti, Messe, Salmi, e altre compositioni; d'alcuni avvertimenti per il contrapuntista e compositore e altre cose pertinenti alla musica,' printed at Parma 1588, in quarto, a very entertaining dialogue, and replete with musical erudition.

HORATIO VECCHI of Modena was greatly celebrated for his vocal compositions at this time: our countryman Peacham was, as he himself relates, his disciple.‡

was appointed the successor to Palestrina in the church of St. Peter, of which Palestrina was Maestro di Cappella.

§ This writer has, in his usual quaint manner, given a short character of Vecchi and his works, which, as he was a man of veracity and judgment, may be depended on. 'I bring you now mine owne master Horatio Vecchi of Modena, beside goodness of aire, most pleasing of all other for his conceipt and variety, wherewith all his works are singularly beautified, as well his madrigals of five and six parts, as those his canzonets printed at Norimberge, wherein for tryall sing his "Vive in fuoco amoroso Lucretia mia," where upon "Io catenato more," with excellent judgment hee driveth a crotchet thosow many minims, causing it to resemble a chaine with the linkes; againe in "S'io potessi racorre i mei sospiri," the breaking of the word Sospiri with crotchet and crotchett rest in sighes; and that "fa mi un canzone," &c. to make one sleep at noon with sundry other of like conceipt and pleasant invention.' *Compleat Gentleman*, 102.

The *Compleat Gentleman* was written by Henry Peacham, an author of some note in the reign of James I. It treats of nobility in general. 'Of the dignity and necessity of learning in princes and nobility. The dutie of parents in the education of their children. Of a gentleman's carriage in the universities. Of stile in speaking and writing of history. Of cosmography. Of memorable observations in the survey of the earth. Of geometry. Of poetry. Of musick. Of statutes, and medallia, and antiquities. Of drawing and painting, with the lives of painters. Of sundry blazons both ancient and modern. Of armory, or blazing armes, with the antiquity of heralds. Of exercise of body. Of reputation and carriage. Of travell. Of warre,' and of many other particulars, to which is added the Gentleman's Exercise, or an exquisite Practice for drawing all Manner of Beasts, making Colours, &c. quarto, 1634. This book abounds with a great number of curious particulars, and was in high estimation with the gentry even of the last age. Sir Charles Sedley, who had been guilty of a great offence against good manners, was indicted for it, and upon his trial being asked by the chief justice, Sir Robert Hyde, whether he had ever read the book called the *Compleat Gentleman*, Sir Charles answered, that saving his lordship he had read more books than himself. *Athen. Oxon. Col.* 1100.

Peacham seems to have been a travelling tutor, and was patronised by the Howard family. He was well acquainted with Douland the latestist; and, while abroad, was a scholar of Horatio Vecchi, as himself testifies in the above note, and probably the bearer of that letter from Luca Marenzio to Douland, mentioned in a subsequent account of that master, and inserted in the account hereafter given of Douland. Besides the *Compleat Gentleman*, Peacham published a *Collection of Emblemes*, entitled *Minerva Britanna*, or a *Garden of Heroical Devices*, with moral reflections in verse, and a diverting little book entitled the *Worth of a Penny*. In his advanced age he was reduced to poverty, and subsisted by writing those little penny books which are the common amusement of children.

* The following account of his appointment, and the ceremonies attending it, is cited by Adami from the book of Ippolito Gamboci, the puntatore heretofore mentioned, with a remark that Antimo Liberata had little reason to say that Palestrina was the last composer to the chapel, seeing that Anerio succeeded him in that honourable employment.

'La mattina della Domenica delle palme venne in cappella il Sig. Luca Cavalcanti maestro di camera dell' Illustriss. e reverendiss. Sig. Card. Aldobrandini, Nipote di N. S. papa Clemente VIII. e disse al collegio da parte del suddetto Sig. Cardinale, che sua santità aveva granato Messer Felice Anerio del posto vacato per la morte di Pierluigi da Palestrina, e che lo aveva accettato per compositore della cappella, e che già godeva la provisione, e però sua Signoria Illustrissima pregava il collegio, che lo volesse accettare in detto posto, e che si contentassero tutti di far una fede di questa ammissione; come fu fatto.'

† By this it should seem that the places which Palestrina held were at his decease divided; for Felice Anerio is expressly said to have succeeded him as Compositore della Cappella, and here it is said that Giovanelli

He composed Masses, Cantiones Sacrae, and one book of Madrigals, which are very fine; but he delighted chiefly in Canzonets, of which he composed no fewer than seven sets.* Milton, who loved and understood music very well, seems to have entertained a fondness for the compositions of Horatio Vecchi; for in his *Life*, written by his nephew Phillips, and prefixed to the English translation of his *State Letters*, it is said that when he was abroad upon his travels, he collected a chest or two of choice music-books of the best masters flourishing at that time in Italy, namely, Luca Marenzio, Monteverde, Horatio Vecchi, Cifra, the prince of Venosa, and others.

EUCHARIUS HOFFMAN, con-rector of the public school at Stralsund, was the author of two tracts on music, the one entitled '*Musicae practicae praecepta*,' the other '*Doctrina de tonis seu modis musicis*,' both of which were very elegantly printed at Hamburg in 1584, and again in 1588. The first of these is of the same kind with those many books written about this time for the instruction of children in the elements of music, of which an account has hereinbefore been given; like the rest of them it is written in dialogue. The author has defined the terms *prolation*, *time*, and *mode*, as they refer to mensural music, in a way that may be useful to those who would understand the Introduction to Practical Music of our countryman Morley; for of *prolation* he says it is a rule by which is estimated the value of *semibreves*; *time* he says considers the value of *breves*; and *mode*, that of the long and the large. In his doctrine of the tones he seems to follow Glareanus.

TOMASSO LODOVICO DA VICTORIA, a Spaniard, Maestro di Cappella of St. Apollinare, and afterwards a singer in the pontifical chapel, was an excellent composer. He published a set of Masses in 1583, dedicated to Philip II. king of Spain, and many other ecclesiastical works, one of the best whereof is that called *La Messa de' Morti*. Peacham says that he resided in the court of the duke of Bavaria about the year 1594; and that of his Latin songs the Seven Penitential Psalms are the best: he commends also certain compositions of his to French words, in which is a song beginning '*Susanna un jour*.' He styles him a very rare and excellent author, adding that his vein is grave and sweet. *Compleat Gentleman*, 101, edit. 1661.

LUCA MARENZIO, a most admirable composer of motetts and madrigals, flourished about this time; he was a native of Coccaglia in the diocese of Brescia. Being born of poor parents, he was maintained and instructed in the rudiments of literature by Andrea Masetto, the arch-priest of the place; but having a very fine voice, and discovering a strong propensity to music, he was placed under the tuition of Giovanni Contini, and became a most excellent composer, particularly of madrigals. He was first Maestro di

Cappella to Cardinal Luigi d' Este, and after that for many years organist of the pope's chapel. He was beloved by the whole court of Rome, and particularly favoured by Cardinal Cinthio Aldrobandini, nephew of Clement VIII. This circumstance, which is related by Adami, does not agree with the account of our countryman Peacham, who says that after he had been some time at Rome he entertained a criminal passion for a lady, a relation of the Pope, whose fine voice and exquisite hand on the lute had captivated him; that he thereupon retired to Poland, where he was graciously received, and served many years, and that during his stay there the queen conceived a desire to see the lady who had been the occasion of his retreat, which being communicated to Marenzio, he went to Rome, with a resolution to convey her from thence into Poland, but arriving there, he found the resentment of the Pope so strong against him, that it broke his heart. Adami mentions his retreat to Poland, but omits the other circumstances; and fixes the time of his death to the twenty-second day of August, 1599. Walther adds, that before his departure for Poland he received the honour of knighthood, but says not at whose hands; and that on his arrival there he had an appointment of a thousand scudi per annum; and, without taking notice of his amour, ascribes his quitting that country to his constitution, which was too tender to resist the cold. The following verses to his memory were written by Bernardino Stessionio, a Jesuit:—

Vocum opifex, numeris mulcere Marentius aures
Callidus, et blandæ tendere fila Chelys,
Frigore lethæo victus jacet. Ille supremam
In seriem maestri funeri exequiæ;
Et charis et blandi sensû aurita voluptas.
Et chorus, et fractæ turba canora lyræ:
Densæ humeris, udæ lachrymis, urgete sepulchrum,
Quis scit, an hinc referat vox rediviva sonum?
Sin tacet, ille choros alios instaurat in astris,
Vos decet amisso conticuissse Deo.

Sebastian Raval, a Spaniard, and who published his first book of madrigals for five voices, in the dedication thereof styles him a divine composer. Peacham, who probably was acquainted with him, says he was a little black man. He corresponded with our countryman Donland the lutenist, as appears by a very polite letter of his writing, extant in the preface to Douland's *First Booke of Songes or Ayres* of four Partes, with *Tableture* for the Lute, and inserted in a subsequent part of this work.

The madrigals of Marenzio are celebrated for fine air and invention. Peacham says that the first, second, and third parts of his *Thyrsis*, '*Veggio dolce mio ben*,' '*Chi fa hoggi il mio Sole*,' and '*Cantava*,' are songs the Muses themselves might not have been ashamed to have composed.† This that follows is also ranked among the best of his compositions:—

* The word Canzonet is derived from Canzone, which signifies in general a song, but more particularly a song in parts, with fuguing passages therein. The Canzonet is a composition of the kind, but shorter and less artificial in its texture. Andrea Adami ascribes the invention of this species of musical composition to Alessandro Romano, surnamed Alessandro dalla Viola, from his exquisite hand on that instrument, and a singer in the pontifical chapel in the year 1560. Osserv. per ben. reg. il Coro de i Cant. della Cap. Pont. pag. 174.

† These are all adapted to English words, the first, '*First morit volea*,' to a translation of the Italian; the second, '*Veggio dolce mio ben*,' to the words, '*Farewell cruel and unkind*;' the third to '*What doth my pretty darling!*' and the last to '*Sweet singing Amaryllis*,' and are to be found in the *Musica Transalpina*, of which it is to be noted there are two parts, and in a collection of Italian madrigals with English words, published by Thomas Watson in 1589, as is also another mentioned by Peacham, '*I must depart all hapless*,' translated from '*Io partirò*.'



DIS - SI a l'a - ma - ta mia lu - ci - da stel - la che
DIS - SI a l'a - ma - ta mia lu - ci - da stel - la che
a l'a - ma - ta mia lu - ci - da stel - la,
piùdogn'al-tra lu - ce, dis - si a l'a - ma - ta mia
piùdogn'al-tra lu - ce, a l'a - ma - ta mia lu - ci - da stel - la, a l'a -
dis - si a l'a - ma - ta mia lu - ci - da stel - la, a l'a -
DIS - SI a l'a - ma - ta mia, dis - si a l'a -
lu - ci - da stel - la che piùd'ogn'altra lu - ce ed
- ma - ta mia lu - ci - da stel - la che piùd'ogn'altra lu - ce ed al
- ma - ta mia lu - ci - da stel - la che piùd'ogn'altra lu - ce
- ma - ta mia lu - ci - da stel - la che piùd'ogn'altra lu - ce ed
al mio cor ad - du - ce fiam - me stra - li e ca - te - .
. . . mio cor ad - du - ce, ed
ed al mio cor ad - du - ce
al mio cor ad - du - ce fiam - me stra - li, ed al mio cor ad
- ne ed al mio cor ad - du - ce fi - am - me
al mio cor ad - du - ce fi - am - me stra -
fi - am - me stra - li e ca - te - ne
- du - ce ed al mio cor ad - du - ce fi - am - me stra -

fi - am - me stra li e ca - te - - ne ch'ogn' hor mi

- - - li e ca - te - - ne ch'ogn' hor mi dan -

fi - am - me stra - li e ca - te - - ne ch'ogn' hor, ch'ogn' hor

- li e ca - te - - ne ch'ogn' hor, ch'ogn' hor

dan - no pe - - - ne ch'ogn' hor mi dan - no pe - ne deh

- - no pe - ne, mi . . dan - - no pe - ne deh . .

mi dan - no pe - ne ch'ogn' hor, ch'ogn' hor mi dan - no . . pe - ne deh . .

mi dan - no pe - - - ne . . deh . .

mori-rò, mori-rò cor mi - o si mori-rò, mori-rò,

mori - rò, mori-rò cor mi - o si mori - rò, mori -

si si mo-ri - rai, si mo-ri rai mori-rò,

si si mo-ri - rai, si mo-ri-rai mori -

mori-rò . . cor mi - o si si mo-ri - rai na non per mio de - si -

- - rò, mo-ri - rò mi - o si si mo-ri - rai ma non per mio de -

mori-rò si mo-ri - rai si ma non per mio de -

- - rò si mo-ri - rai si ma non per mio de

- - o si si mo-ri - rai ma non per mio de - si - o.

- - si - - o si si mo-ri - rai ma non per mio de - si - - o.

- - - si - o si ma non per mio de - si - - o.

- - si - o si ma non per mio de - si - - o.

ANDREAS RASELIUS, chanter in the college of Ratisbon, published at Norimberg, in 1589, 'Hexachordum, seu questiones musicae practicae.' This book is very methodically written, but contains little more than is to be found in others of the like kind, except some short examples of fugue from Orlando Lasso, Jusquin De Prez, and other authors, which in their way have great merit.

CASPAR KRUMBHORN was a native of Lignitz in Silesia, and was born on the twenty-eighth day of October, 1542. In the third year of his age he lost his sight by the small-pox, and became totally blind. His father dying soon after, his mother married one named Stimmler, which gave occasion to his being called Blind Stimmler. Krumbhorn had a brother named Bartholomew, who was considerably older than himself, and was pastor of Waldau; and he discovering in his younger brother, as he grew up, a strong propensity to music, placed him under the care of Knobel, a famous musician and composer at Goldberg, of whom he learned to play first on the flute, next on the violin, and, last of all, on the harpsichord, on each of which instruments he became so excellent a performer, that he excited the admiration of all that heard him. The fame of these his excellencies, as also of his skill in composition, had reached the ears of Augustus, elector of Saxony; who invited him to Dresden, and having heard him perform, and also heard some of his compositions of many parts performed by himself and others; and being struck with so extraordinary a phenomenon as a young man deprived of the faculty of seeing, an excellent performer on various instruments, and deeply skilled in the art of practical composition, he endeavoured, by the offer of great rewards, to retain him in his service; but, preferring his own country to all others, Krumbhorn returned to Lignitz in the twenty-third year of his age, and was appointed organist of the church of St. Peter and Paul there, which station he occupied fifty-six years, during which space he had many times the direction of the musical college. He died on the eleventh day of June 1621, and was buried in the church of which he was organist, where on his tomb was engraven the following epitaph:—

Vis scire viator
Casparum Krumbhornium
Lign. Reip. civem honoratum,
qui
cum tertio ætatis anno variolar.
ex malignitate visu
privatus,
Musices dehinc scientia et praxi
admiranda
præclaram sibi nominis
Existimationem domi forisque
comparasset,
Conjugii optabilis felicitate,
Bonorum etiam Magnatum,
Dei imprimis gratia evectus
Singulari sortem moderatione
Ad ann. usque LXXIIX toleravit
Organic. munus apud Eccles. P. P.
Annos LVI. non sine industriæ
testimonio gessisset,
Pie demum beateque A. C. 1621.

11 Jun. in Dom. obdormivit.
Anna et Regina Filias, earumque
Mariti superstites
Parentem Socerumque B. M.
hoc sub lap. quem
Vivens sibi ipsimet destinaverat
honorifice condiderunt.
Nosti, quod voluit quicumque es,
NOSCE TE IPSUM.

It is said that Krumbhorn was the author of many musical compositions, but it does not appear that any of them were ever printed.

Walther, in his Lexicon, has an article for TOBIAS KRUMBHORN, organist at the court of George Rudolph, duke of Lignitz, and a great traveller, who died in the year 1617, aged thirty-one years. As Caspar and Tobias Krumbhorn were contemporaries, and of the same city, it is not improbable that they were relations at least, if not brothers; although nothing of the kind is mentioned in the accounts given by Walther of either of them.

CHAP. XC.

Balthazarini, surnamed Beaujoyeux, a celebrated Italian musician, lived under the reign of Henry III. of France. The Marshal de Brissac, Governor in Piedmont, sent this musician to the king with the band of Violins, of which he was chief. The Queen gave him the place of her valet-de-chambre, and Henry granted him the same post in his household. Balthazarini pleased the court as well by his skill in playing on the violin, as by his inventions of dances, music shows, and representations. It was he who composed in 1581 the ballet for the nuptials of the Duke de Joyeuse with Madlle. de Vaudermont, sister to the Queen, and the same was represented with extraordinary pomp; it has been printed under the title of the Queen's comic ballet made for the nuptials aforesaid.

CLAUDE LE JEUNE, (*a Portrait*), a native of Valenciennes, was a celebrated musician, and composer of the chamber to Henry IV. of France. He was the author of a work intitled Dodecachorde, being an exercise or praxis on the twelve modes of Glareanus; Mons. Bayle cites a passage from the *Sieur D'Embry's Commentary on the French translation of the life of Apollonius Tyanæus*, relating to this work, to this effect: 'I have sometimes heard the *Sieur Claudin* the younger say, who, without disrespect to any one, far exceeded all the musicians of the preceding ages, that an air, which he had composed with its parts, was sung at the solemnity of the late duke of Joyeuse's marriage in the time of Henry III. king of France and Poland, of happy memory, whom God absolve; which as it was sung, made a gentleman take his sword in hand, and swear aloud that it was impossible for him to forbear fighting with somebody. Whereupon they began to sing another air of the Subphrygian mode, which made him as peaceable as before; which I have had since confirmed by some that were present—such power and force have the

'modulation, motion, and management of the voice when joined together, upon the minds of men. To conclude this long annotation, if one would have an excellent experiment of these twelve modes, let him sing or hear sung, the Dodecachorde of Claudin the younger, of whom I have spoken above, and I assure myself he will find in it all those figures and variations managed with so much art, harmony, and skill, as to confess that nothing can be added to this master-piece but the praises that all the lovers of this science ought to bestow upon this rare and excellent man, who was capable of carrying music to the utmost degree of its perfection, if death had not frustrated the execution of his noble and profound designs upon this subject.*

Claude le Jeune was also the author of a work entitled *Meslanges*, consisting of vocal compositions for 4, 5, 6, 8, and 10 voices, to Latin, Italian, and French words, many of them in canon, printed in 1607. A second part of this work was published in 1613, by Louis Mardo, a relation of the author, and dedicated to Mons. de la Planch, an advocate in the parliament of Paris. But the most celebrated of his compositions are his *Psalms*, which, being a Hugonot, he composed to the words of the Version of Theodore Beza and Clement Marot, and of these an account will hereafter be given.

HEROOLE BOTTRIGARO, (*a Portrait*,) a native of Bologna, published, in 1593, '*Il Patrizio, ovvero de' discorsi armonici di Aristosseno, parere et vera dimostrazione.*' The occasion of writing this book was as follows: one Francesco Patricio, a man of great learning,† had written a book intitled '*Della poetica, deca istoriale, deca disputata,*' wherein, discoursing on music, and of the Genera in particular, he gives the preference to that division of the tetrachords which Euclid had adopted. Bottrigaro, who appears to have been an Aristoxenean, enters into an examination of this work; and not without some severe reflections on his adversary, contends for that division of the tetrachord in each of the genera which distinguishes the system of Aristoxenus from that of Euclid. This book, some few years after its publication, Patricio being then dead, was very severely criticised by Giovanni Maria Artusi, of whom mention has already been made in the course of this work, who, with a becoming zeal for the reputation of Patricio, undertook to vindicate him, as well against Bottrigaro, as another writer named Annibale Meloni, a musician of Bologna, the author of a book intitled, '*Il Desiderio, ovvero de' concerti di varii strumenti musicali, Dialogo di Alemanni Benelli.*'‡ But the most celebrated of Bottrigaro's works is that intitled, '*Il Melone, discorso armonico del M. III.*

* Bayle art. Goudimel, in not.

† Patricio was of Ossevo in Dalmatia. In his youth he travelled much in Asia; then settled in the island of Cyprus, where he purchased a large estate, but lost every thing when the Venetians lost that kingdom, so that he was obliged to go to Italy, and there live on his wit. He read Platonic philosophy in the university of Ferrara, and at last died at Rome, much esteemed and caressed by all lovers of literature, though he had advanced some opinions in the mathematical science, and about Italian language, that were then, and still are, thought absurd. He was an Academician of the Crusca, and one of the great defenders of Ariosto against those that preferred Tasso to him. Baretti's Italian Library, 328.

‡ A fictitious name made up by the transposition of the letters of the author's true name; as related at large in a subsequent part of this work.

'Sig. Cavaliere Hercole Bottrigaro, ed. il Melone secondo, considerazioni musicali del medesimo sopra un discorso di M. Gandolfo Sigonio intorno à madrigali et à libri dell' antica musica ridutta alla moderna pratica di D. Nicola Vicentino e nel fine esso Discorso del Sigonio.' Ferrara, 1602.

In this book, which is professedly an examen of that of Vicentino, the author relates at large the controversy between him and Vicentio Lusitano. He charges them both with vanity and inconsistency, but seems to decide in favour of the former. The remark he makes on the conduct of Bartolomeo Egobedo and Ghisilino D'Ancherts, is very judicious; for the sentence given by them, and published with so much solemnity, assigns as the motive for condemning Vicentino, that he had not, either by words or in writing, given the reasons of his opinion. Bottrigaro's observation is this, seeing then that Vicentino had not declared the foundation of his opinion, it was their duty as judges to have proceeded to an enquiry whether it had any foundation or not, and, agreeably to the result of this enquiry, to have given sentence for or against him; and for not pursuing this method he sticks not to accuse them of partiality, or rather ignorance of their duty, as the arbitrators between two contending parties.

Bottrigaro appears to have been a man of rank; the letters to him, many of which he has thought it necessary to print, bespeak as much. Walther styles him a count; and his *Il Melone*, written in answer to a letter of Annibale Meloni, is thus dated, '*Della mia à me diletteuole villa nel commune di S. Alberto.*' Notwithstanding this circumstance, and that he was not a musician by profession, he appears to have been very well skilled in the science. It seems that he entertained strong prejudices in favour of the ancient music, and that he attempted, as Vicentino and others had done, to introduce the chromatic genus into practice, but with no better success than had attended the endeavours of others. He corrected Gogavinus's Latin version of Ptolemy in numberless instances, and that to so good a purpose, that Dr. Wallis has in general conformed to it in that translation of the same author, which he gave to the world many years after. He also translated into Italian, Boetius *De Musica*, and as much of Plutarch and Macrobius as relates to music; besides this, he made annotations on Aristoxenus, Franchinus, Spataro, Vicentino, Zarlino, and Galilei, and, in short, on almost every musical treatise that he could lay his hands on, as appears by the copies which were once his own, and are now reposit in many libraries in Italy.

It is to be lamented that the writings of Bottrigaro are, for the most part, of the controversial kind, and that the subjects of dispute between him and his adversaries tend so very little to the improvement of music. If we look into them we shall find him taking part with Meloni against Patricio, and contending for a practice which the ancients themselves had exploded; and in the dispute with Gandolfo Sigonio he does but revive the controversy which had been so warmly agitated between Vicentino and Vincentio Lusitano: and though he seems to censure that determination of the judges Bartolomeo Egobedo and Ghisilino Dan-

cherts, by which the former was condemned, he leaves the question just as he found it.

Of Bottrigaro's works it is said that they contain greater proofs of his learning and skill in music than of his abilities as a writer, his style being remarkably inelegant; nevertheless he affected the character of a poet, and there is extant a collection of Poems by him, in octavo, printed in 1551. Walther represents him as an able mathematician, and a collector of rarities, and says that he was possessed of a cabinet, which the emperor Ferdinand II. had a great desire to purchase. He died in 1609.

We meet with the name of LUDOVICUS BROOMAN, an excellent musician, who flourished towards the end of the sixteenth century, and died at Brussels in 1597. Gerard Vossius has given him a place in his Catalogue, and he is elsewhere styled Musices Princeps. The misfortune of his being blind from his nativity might possibly contribute to exalt his character; for there are no compositions of his extant, at least in print. Some remarkable instances of blind persons who have been excellent in music, might lead to an opinion that the privation of that sense was favourable to the study of it: in the case of Salinas it seems to have been no impediment to the deepest research into the principle of the science. Caspar Krumphorn of Lignitz, and Martini Pesenti of Venice, are instances to the same purpose; the former of these being an excellent organist and a composer of church-music, and the latter a composer of vocal and instrumental music of almost all kinds; and both these persons were blind, the one from his infancy, and the other from his nativity; and it is well known that the famous Sebastian Bach and Handel, perhaps the two best organists in the world, retained the power both of study and practice many years after they were severally deprived of the sense of seeing.

VALERIO BONA of Milan, published in 1595, '*Regole del contraponto, et compositione brevemente raccolte da diuersi Autori. Operetta molto facile et utile per i scolari principianti.*' The author takes occasion to celebrate as men of consummate skill in music, Cyprian de Rore, Adrian Willaert, Orlando de Lasso, Christopher Morales, and Palestrina. The character of his book is, that it is remarkable for the goodness of its style and language. The author was an ecclesiastic, and a practical composer, as appears by a catalogue of his works in the Musical Lexicon of Walther; they consist of Motets, Masses, the Lamentations of Jeremiah, Madrigals, Canzonets, and other vocal compositions.

LUDOVICO ZACCONI, an Augustine monk of Pesaro, and musician to the Duke of Bavaria, was the author of a valuable work in folio, printed at Venice in 1596, with the following title, '*Prattica di musica utile et necessaria si al compositore per comporre i canti suoi regolatamente, si anco al cantore per assicurarsi in tutti le cose cantabili.*'

This book of Zacconi is justly esteemed one of the most valuable treatises on the subject of practical music extant. Morley appears to have been greatly indebted to the author of it, whom he calls Fryer Lowyes Zaccone, and cites frequently in his Introduction to Practical Music.

In the course of his work Zacconi seems to have declined all enquiry into the music of the ancient Greeks, and to have been very little solicitous about the investigation of ratios; his work seems to be calculated for the improvement of practical music, and therefore contains nothing relating to the theory of the science.

Zarlino's works seem to be intended for the use of philosophers, but this of Zacconi abounds with precepts applicable to practice, and suited to the capacities of singers and men of ordinary endowments. Among a great number of directions for the decent and orderly performance of choral service, he recommends a careful attention to the utterance of the vowels; which passage it seems Morley had an eye to when he complained, as he does in his Introduction, pag. 179, in these words: 'The matter is now come to that state, that though a song be never so well made, and never so aptly applied to the words, yet shall you hardly find singers to express it as it ought to be; for most of our churchmen, so they can cry louder in the quier than their fellows, care for no more, whereas by the contrarie they ought to studie how to vowel and sing cleane, expressing their words with devotion and passion, whereby to draw the hearer, as it were in chaines of gold by the eares, to the consideration of holy things.'

In the sixty-seventh chapter of the first book Zacconi enumerates the necessary qualifications of a chapel-master.

In the thirty-eighth chapter of the second book he speaks of the mass of Jusquin De Prez, 'Le *Homme armé*,' mentioned by Glareanus, Salinas, Doni, and other writers, as one of the most excellent compositions of the time. This he does to introduce a mass of Palestrina with the same title, which he gives at length, with his own remarks thereon.

The third book is on the subject of proportion, which he has explained and illustrated by a variety of examples from the best authors.

At the end of the fourth and last book he enumerates the several musical instruments in use in his time, with the compass of notes proper to each; in his declaration whereof it is remarkable that he makes *bb* the limit of the superacutes, and the highest note in the scale for the violin, a particular from whence it is to be inferred that the practice of shifting the hand was unknown to him.

In the year 1622 Zacconi published a second part of his *Prattica Musica*, which Morley never saw, for he died in 1604. The author at this time was musician to Charles archduke of Austria, and also to William duke of Bavaria, his former patron. In this work he treats of the elements of music, and the principles of composition.

Speaking of the invention of the syllables by Guido Aretinus, he says that some of his time had objected that it was imperfect, inasmuch as it gave no syllable to the last note of the septenary, and thereby incumbered the system with what are called the mutations. And he mentions a musician, Don Anselmo Fiammengo, who had formerly been in the service of the duke of Bavaria, and, as Orlando de Lasso once told the author, made use of the syllable

no in succession after that of LA for the purpose of getting rid of the mutations.*

Zacconi mentions also another musician, Don Adriano Bianchieri, of Bologna, who for b FA made use of the syllable BA, and for b MI the syllable BI, a distinction, that, as above is related, has been adopted by the Spaniards.

The rules for the composition of counterpoint, of fugue, and canon, in all their various forms laid down by Zacconi, are drawn from the writings of Zarlino, Artusi, and other the most celebrated Italian writers. In the course of the work he takes occasion to mention a conversation on music held in the presence of Zarlino in the year 1584, in which a character was given of the several musicians of that and the preceding age, and the respective attributes of each pointed out and assented to by the persons then present. To Costanzo Porta was ascribed great art, and a regular texture in his compositions; to Alessandro Striggio, a vague but artificial modulation; and to Messer Adriano, by whom it is supposed was meant Adrian Willaert, great art, with a judicious disposition of parts: Morales, he says, was allowed to have art, counterpoint, and good modulation; Orlando de Lasso, modulation, art, and good invention; and Palestrina, every excellence necessary to form a great musician.

In the thirty-second chapter of the second book he takes occasion to observe on the impiety of introducing madrigals and secular songs among the divine offices, the singing whereof is prohibited by the church as a mortal sin; from hence he takes occasion to applaud Palestrina for his conduct in this respect, who, he says, enriched the church with his own sweet compositions, in a style suited to public worship, calculated to promote the honour of God, and to excite devotion in the minds of the auditors.

CARLO GESUALDO, prince of Venosa, flourished about the latter end of the sixteenth century. Venosa was the Venusium of the Romans, and is now a principality of the kingdom of Naples, situate in that part of it called the Basilicate; it is famous for being the place where Horace was born; and little less so in the judgment of musicians on account of the person now about to be spoken of. He was, as Scipione Cerreto relates, the nephew of Cardinal

* This objection has often been made to Guido's invention: Erius Puteanus added, as a seventh, the syllable SI. Kepler speaks of a certain German who articulated the septenary by seven syllables, but reprehends him for it in terms that serve at least to show that the method of solmisation by the hexachords is to be preferred to that of the tetrachords, which prevailed some years in this country, and was practised by Dr. Wallis. The passage from Kepler is to this effect: 'But as there are three places of the semitone in the tetrachord, therefore that these syllables might not be too general, but rather that the semitone might always be denoted by MI, FA, or FA MI, there was a necessity for the addition of two other syllables, that in these UT, RE, MI, FA, the semitone might be in the highest place, but that in these RE, MI, FA, SOL, the semitone might be in the middle place; and, lastly, that in these, MI, FA, SOL, LA, the semitone might be in the lowest place; and this is a reason why the inventors of the scale made use of six syllables and not eight; therefore let the German see what advantage he has gained by the increase, when he made use of seven, instead of six syllables, SO, CE, DI, GA, LO, MA, MI; for if he thought it was necessary to make use of as many notes save one, as there are chords in an octave, in order to represent the identity of the octave by the first syllable SO, I pray you what deficiency was there in the letters a, b, c, d, e, f, g, which were long before made use of for that purpose?' Joann. Keplerus Harm. Mundi, lib. III. cap. x.

Notwithstanding this argument of Kepler, it is well known that the French to the six syllables of Guido add a seventh, namely, SI, of the introduction whereof by Le Maire an account is given in pag. 160 of this work.

Alfonso Gesualdo, archbishop of Naples, and received his instructions in music from Pomponio Nenna, a celebrated composer of madrigals. Blancanus, in his *Chronologia Mathematicorum*, speaks thus of him: 'The most noble Carolus Gesualdus, prince of Venusium, was the prince of musicians of our age; for he having recalled the Rythmi into music, introduced such a style of modulation, that other musicians yielded the preference to him; and all singers and players on stringed instruments, laying aside that of others, everywhere eagerly embraced his music.' Mersennus, Kircher, Doni, Berardi, and indeed the writers in all countries, give him the character of the most learned, ingenious, and artificial composer of madrigals, for it was that species of music alone which he studied, that ever appeared in the world. Blancanus also relates that he died in the year 1614.

Alessandro Tassoni, who celebrates him in the highest terms of commendation, adds to his character this remarkable particular, viz., that he imitated and improved that melancholy and plaintive kind of air which distinguishes the Scots melodies, and which was invented about the year 1420, by James the First, king of Scotland, and to this he ascribes the sweetness of his admirable compositions.

There are extant no fewer than six books of madrigals for five, six, and more voices, of this excellent author; the first five were published in parts in 1585 by Simone Molinaro, a musician, and chapel-master of Genoa. The same person in the year 1613 published them, together with a sixth book in score, with this title, 'Partitura delli sei libri de' madrigali a cinque voci, dell' illustrissimo et excellentiss. Principe di Venosa D. Carlo Gesualdo. Fatica di Simone Molinaro, Maestro di Capella nel Duomo di Genoua. In Genoua, appresso Giuseppe Pavoni.' Folio.

It is very probable that the last of these publications was made under the direction of the author himself, and that it was intended for the use of students; the madrigals contained in it are upwards of one hundred in number: the sixth book was again published in parts at Venice in 1616. In a MS. in the music-school of Oxford, mention is made of two other collections of madrigals of the prince of Venosa, as namely, one by Scipio Stella in 1603, and another by Hector Gesualdo in 1604; but that by Molinaro above-mentioned, as it is in score, seems to be the most valuable collection of his works extant, and probably may include the whole of his compositions.

Doni speaking of the fourth madrigal in the sixth book, 'Resta di darma noia,' calls it 'quell' artificiosissimo Madrigali del principe;† and indeed it well deserves that epithet; for being calculated to express sorrow, it abounds with chromatic, and even enarmonic intervals, indeed not easy to sing, but admirably adapted to the sentiments.

Kircher, in the *Musurgia*, tome I. pag. 599, mentions the following madrigal, being the first of the first book of Molinaro's edition, as a fine example of the amorous style.

† De' Pensieri diversi di Alessandro Tassoni, libro X. cap. xxiii.

‡ Gio. Batt. Doni, nelle sue *Compendio del Trattato de' Generi e de' Modi della Musica*. In Roma, 1635, quarto, pag. 16.

BA - CI soa - vi e ca - ri ci - bi de la mia vi - - ta

BA - CI soa - vi e ca - ri ci - bi de la mia vi - ta, ci - bi de

BA - CI soa - vi e ca - - ri ci - bi de la . . .

BA - CI soa - vi e ca - ri ci - bi de la mia vi - ta, . . . ci - bi de

BA - CI soa - vi e ca - ri ci - bi de la

c'horm'inuolate hor mi rendete il co - re, hor

la mia vi - ta c'hor m'inuo-la-te, c'horm'inuo-la - te

. . . mia vi - ta c'horm'inuola - te hor mi ren-de-te il co - re, hor mi rendete il

la mia vi - ta c'hor m'inuo-la-te, c'horm'inuo-la - te

mia vi - ta c'hor mi rendete il co - - - re

mi rendete il co - re hor-mi rendete il co - re per voi conuien ch'impari non

hor mi ren-de - - - te il co - re per voi conuien ch'impari non sentite

co - - - re hor mi rendete il co - re per voi conuien ch'impari come un' al - ma ra - pi - ta

hor mi rendete il co - re per voi conuien ch'impari

hor mi ren-de - - - te il co - - - re per voi conuien ch'impari come un' al - ma ra - pi -

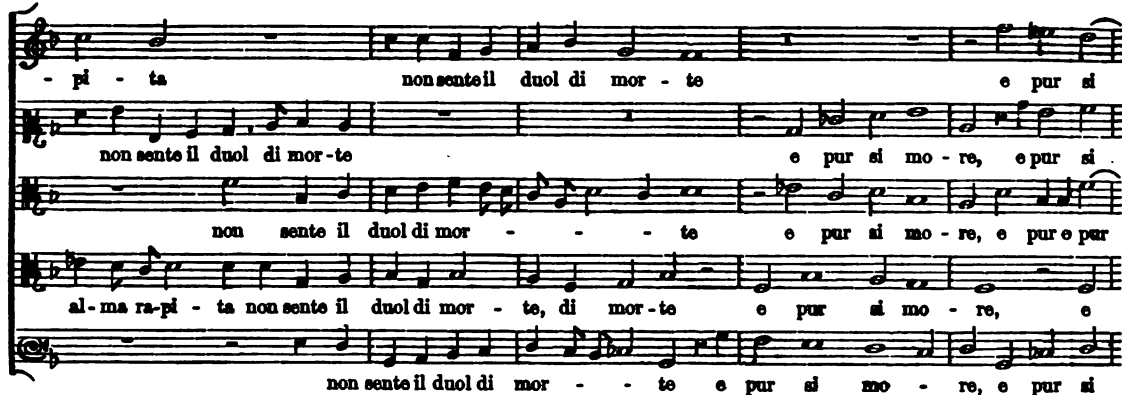
sente il duol di mor - te, non sente il duol di mor - te come un' al - ma ra - pi - ta, come un' al - ma ra -

duol di mor - te come un' al - ma ra - pi - - - ta, come un' al - ma ra - pi - ta

come un' al - ma ra - pi - ta non sente il duol di mor - - - te, come un' al - ma ra - pi - - - ta

come un' al - ma ra - pi - ta non sente il duol di mor - - - te, come un

- ta, come un' al - ma ra - pi - ta non sente il duol di mor - - - te, come un' al - ma ra - pi - ta



- pi - ta non sente il duol di mor - te e pur si
 non sente il duol di mor - te e pur si mo - re, e pur si
 non sente il duol di mor - - - te e pur si mo - re, e pur e pur
 al - ma ra - pi - ta non sente il duol di mor - te, di mor - te e pur si mo - re, e
 non sente il duol di mor - - - te e pur si mo - re, e pur si



. . mo - re conuen ch'im-pa-ri non sente il duol di mor - -
 me - re per voi conuen ch'im-pa-ri non sente il duol di mor - te
 - - si mo - re per voi conuen ch'im-pa-ri come un'
 pur si mo - re per voi conuen ch'im-pa-ri come un'alma ra pi - ta, come un'alma ra - pi -
 mo - - re per voi conuen ch'im-pa-ri come un' - al-ma rapi - ta, come un'al-ma ra - pi -



- te non sente il duol di mor - - - te, non sente il
 come un' al - ma ra - pi - - - ta non sente il duol di mor - -
 al - ma ra - pi - ta, come un' al - ma ra - pi - ta non sente il duol di
 - ta non sente il duol di mor - te, non sente il duol di mor - -
 - ta non sente il duol di mor - - - te



duol di mor - te e pur si . . mo - - re.
 - - - te e pur si mo - re, e pur si mo - - re.
 mor - - - te e pur si mo - re, e pur si mo - re.
 - - te di mor - te e pur si mo - - re, e pur si mo - - - re.
 e pur . si mo - re, e pur si mo - - re.

PART II.

per - che sempre io vi ba - - ci,
 per - che sempre io vi ba - -
 Quanto hà di dolce a - mo - - re per - che sempre io vi
 Quanto hà di dolce a - mo - - re
 Quanto hà di dolce a - mo - - re per - che

per - che sempre io vi ba - ci o dol - cis - si - me ro - se,
 - ei sempre io vi ba - ci o dol - cis - si - me ro - se in voi tut - to ri - po - se,
 ba - ci sempre io vi ba - ci o dol - cis - si - me ro - se in voi tut - to ri - po - se,
 per che sempre io vi ba - ci o dol - cis - si - me ro - se in voi tut - to ri - po - - se,
 sempre io vi ba - - ci o dol - cis - si - me ro - se,

quanto hà di dolce a - mo - - re per - che
 quanto hà di dolce a - mo - - - re per - che sem -
 quanto hà di dolce a - mo - re per - che sempre io vi ba - ci per - che
 per - che sempre io vi ba - ci, sempre io vi ba - ci,
 perche sempre io vi ba - ci, per - che sempre io vi

sempre io vi ba - - ci o dol - cis - si - me ro - se in voi
 - pre io vi ba - ci o dol - cis - si - me ro - se in
 sempre io vi ba - - ci o dol - cis - si - me ro - se in voi . tut - to ri - po - se, in
 sempre io vi ba - ci o dol - cis - si - me ro - se in voi, in voi tut - to ri - po - se,
 ba - ci . . o dol - cis - si - me ro - se in voi tut - to ri - po - se,

tut - to ri - po - se, deh, deh s'io po - tes - si ai vostri dolci ba -
 voi tut - to ri - po - se, deh, deh s'io po - tessi ai vostri dolci ba - ci, ai vostri dolci ba -
 voi in voi tut - to ri - po - se, deh, deh s'io potessi ai vostri dolci ba - ci, ai vostri dolci ba -
 in voi tut - to ri - po - se, deh, deh s'io po - tessi ai vostri dolci ba - ci, ai vostri dolci ba -
 deh, deh s'io po - tessi ai vostri dolci ba - ci, ai vostri dolci ba -

- ci la mia vi - ta fi - ni - re o che dol - ce mo - ri - re,
 - ci la mia vi - ta fi - ni - re o che dol - ce mo - ri - re,
 - ci la mia vi - ta fi - ni - re o . . che dol - ce mo - ri - -
 - ci la mia vi - ta fi - ni - re la mia vi - ta fi - ni - re o . . che dol - ce mo - ri - -
 - ci la mia vi - ta fi - ni - re o che

o che dol - ce mo - ri - re, o che dol - ce mo - ri - re, o che dol - ce mo - ri - - re.
 o che dol - ce mo - ri - re, o che dol - ce mo - ri - re, o che dol - ce mo - ri - re.
 - re, o che dol - ce mo - ri - re, o che dol - ce mo - ri - re.
 - re, o che dol - ce mo - ri - re, o che dol - ce mo - ri - re, o che dol - ce mo - ri - re.
 dol - ce mo - ri - re, . . o che dol - ce mo - ri - re.

CARLO GESUALDO, PRENCIPE DI VENOSA.

And page 601 of the same tome of the Musurgia, he recommends the nineteenth madrigal of the third book, 'Dolcissimo sospiri,' as an example of sorrow.

Again, the same author, page 608 of the same tome of the Musurgia, recommends the twenty-second madrigal of the sixth book, 'Già piansi nel dolore,' as an example of joy and exultation.

The distinguishing excellences of the compositions of this admirable author are, fine contrivance, original harmony, and the sweetest modulation conceivable; and these he possessed in so eminent a degree, that one of the finest musicians that these later times

have known, Mr. Geminiani, has been often heard to declare that he laid the foundation of his studies in the works of the Prencipe di Venosa.

CHAP. XCI.

THE prince of Venosa is not the only person of rank who has distinguished himself by his skill in music. Kircher mentions an earl of Somerset as the inventor of a certain kind of Chelys or viol of eight chords, which contained all the secrets of music in an eminent degree, and ravished every hearer

with admiration. Musurg. tom. I. pag. 486.* And Walther says of Maurice, landgrave of Hesse Cassel, that he was an excellent composer of music. Peacham speaks to the same purpose, and gives the following account of him:—

‘Above others who carryeth away the palme for ‘excellency, not onely in musicke, but in whatsoever ‘is to be wished in a brave prince, is the yet living ‘MAURICE, LANDGRAVE OF HESSEN, of whose owne ‘composition I have seene eight or ten severall setts ‘of motets and solemne musicke, set purposely for his ‘owne chappell,† where, for the great honour of ‘some festivall, and many times for his recreation ‘onely, he is his owne organist. Besides he readily ‘speaketh ten or twelve severall languages; he is so ‘universall a scholler, that comming, as he doth often, ‘to his university of Marpurg, what questions soever ‘he meeteth with set up, as the manner is in the ‘Germane and our universities, hee will ex tempore ‘dispute an houre or two (even in bootes and spurres) ‘upon them with their best professors. I passe over ‘his rare skill in chirurgery, he being generally ‘accounted the best bone-setter in the country. Who ‘have seene his estate, his hospitality, his rich furnished armory, his brave stable of great horses, his ‘curtesie to all strangers, being men of quality and ‘good parts, let them speake the rest.† But to be more particular as to his skill in music. Valentine Guckius began a work entitled ‘Opera metrici sacri ‘sanctorum, Dominicalium et feriarum,’ but never finished it; this work was completed and published by Maurice, landgrave of Hesse, above-mentioned.

GIOVANNI CROON, of Venice, flourished at this time. He was chapel-master of St. Mark’s, and very pro-

* We know of no earl of Somerset to whom the invention of any such musical instrument may be ascribed. Edward Somerset, marquis of Worcester, the friend and favourite of king Charles I. was remarkable for his inventive faculty, which he endeavoured to manifest in a little book entitled ‘A century of the names and scantlings of such inventions as at present I can call to mind to have tried and perfected [my former notes being lost];’ first printed in 1663, and since among the Harleian tracts. Mr. Walpole has given an account of the contents of this book, not more humorous than just, in the following words: ‘It is a very small piece, containing a dedication to Charles the Second, another to both houses of parliament, in which he affirms having, in the presence of Charles the First, performed many of the feats mentioned in his book; a table of contents, and the work itself, which is but a table of contents neither, being a list of an hundred projects, most of them impossibilities, but all of which he affirms having discovered the art of performing: some of the easiest seem to be, how to write with a single line; with a point; how to use all the senses indifferently for each other, as, to talk by colours, and to read by the taste; to make an unsinkable ship: how to do and to prevent the same thing; how to sail against wind and tide; how to form an universal character; how to converse by jangling bells out of tune; how to take towns or prevent their being taken; how to write in the dark; how to cheat with dice; and, in short, how to fly. Of all these wonderful inventions the last but one seems the only one of which his lordship has left the secret.’ Catalogue of Royal and Noble Authors vol. I. pag. 242.

† These had been procured by Douland when he was abroad, and were shown by him to Peacham at sundry times. Peacham’s Emblems, pag. 101, in not.

‡ Compl. Gent. edit. 1634, pag. 99. It seems that formerly the character of this prince was well known, and his reputation very high in England, for till within these few years has been the sign of a reputable public-house on the north side of the high eastern road leading to Mile-end from London; it represented a general in armour, and was underwrote Grave, i. e. Landgrave, Maurice; and upon repainting the sign, by corruption, Morris.

From this circumstance it should seem that he was a favourite with the English, who, though they might be strangers to his endowments, might esteem him for his firm attachment to the protestant religion, for the preservation whereof he formed a league in 1603, which produced a union of the protestant powers; but being overpowered by count Tilly in 1628, he was compelled to surrender his estates to his son William, and spend his days in retirement. He died in 1632, and is not less celebrated for his learning and piety, than for his many and various accomplishments. Heyl. Cosm. 419.

bably the immediate successor of Zarlino. Zacconi, in his ‘Prattica di musica,’ published in 1596, styles him vice-master of the chapel of St. Mark; from whence it is pretty certain that he must at first have been the substitute of Zarlino in that office. Morley commends him highly; and Peacham says that for a full, lofty, and sprightly vein, he was second to none, he adds, that while he lived he was one of the most free and brave companions in the world. Nevertheless his compositions are all of a devout and serious kind, and of these, his Penitential Psalms, which have been printed with English words, are the best.

SETHUS CALVISIUS, the son of a poor peasant named Jacob Kalwitz, of Gorschleb near Sachsenburg in Thuringia, was born on the twenty-first day of February, in the year 1556. He received the rudiments of learning in the public school of Franckenhäusen, but, after three years stay, was removed to Magdeburg, from whence he was sent to the university of Leipsic, having no other means of support there than the contributions of some persons whom he had made his friends. His pursuits in learning were various, for he is not more celebrated as a musician than a chronologer; but it is in the first capacity that he is here spoken of; and indeed he was deemed so able a proficient in music, that very early in his life he had the direction of the choir in the university church, and soon after became preceptor in music in the Schul-Pforte, or principal school in Upper-Saxony; ten years after which, he became chanter in the church of St. Thomas in the city of Leipsic, and fellow of the college there, in which stations he died on the twenty-third day of November, in the year 1617, or, as some write, 1616. The greatness of his reputation procured him many invitations to settle in foreign universities, but he declined them all. His musical writings are, ‘Melopeiam, seu ‘melodiæ condendæ rationem, quam vulgò musicam ‘poeticam vocant,’ printed at Erfurth in 1595, as Lipenius places it, or, according to others, in 1602. In 1611 he published his Opuscula Musica, and in the year after, his Compendium Musicum, a book for the instruction of beginners; but a method of solmisation by the seven syllables, DO, RE, MI, FA, SOL, LA, SI, having then lately been introduced, which he seemed greatly to approve, he republished it in the same year, with the title of ‘Musice artis præcepta nova et facillima, &c.’ He also published ‘Exercitationes musicas,’ in number three. In 1615 he composed the hundred and fiftieth Psalm in twelve parts, for three choirs, on the nuptials of Caspar Anckelman, a merchant of Hamburg, and caused it to be printed in folio at Leipsic.

Of the Exercitationes, the first is on the modes of the ancients, and contains a catalogue of compositions by the old German, Flemish, and Italian masters in those several modes.

The second of the Exercitationes is entitled ‘De ‘Initio et Progressu musices, et aliis quibusdam ad ‘eam rem spectantibus.’ This appears to be the substance of lectures read by the author in the public school at Leipsic, and is a very learned, ingenious,

and entertaining composition. In it he takes notice of that invention of an anonymous Dutch musician for avoiding the mutations, by giving to the septenary the syllables BO, CE, DI, GA, LO, MA, NI, which, as has been mentioned in a preceding note, Kepler has taken notice of and reprehended. The two first parts of the *Exercitationes* were printed at Leipsic in 1600.

Calvisius in this discourse inclines to the opinion that polyphonous music was unknown to the ancient Greeks; and for fixing the era of its invention, observes that Bede makes use of the terms *Concentus*, *Discantus*, *Organis*, from which it is to be inferred that he was not able to carry it higher than the beginning of the eighth century, about which time Bede wrote.

The last of the *Exercitationes*, printed at Leipsic in 1611, contains a refutation of certain opinions of Hippolytus Hubmeier, poet-laureate to the emperor, and a public teacher at Gottingen, who it seems had written on music.

Our countryman Butler cites Calvisius in almost every page of his *Principles of Music*; and in one place in particular uses these words: 'Sethus Calvisius, that singular musician, to whom the students of this abstruse and mysterious faculty are more beholden than to all that have ever written thereon.' His chronological writings are greatly esteemed; in them he had the good fortune to please Joseph Scaliger, who has given him great commendations: he wrote against the Gregorian calendar a work entitled '*Elenchus Calendarii Gregoriani, et duplex Calendarii melioris formula*,' published at Frankfort in 1612, and lastly, *Chronologia*, printed at the same place in 1629.

GIOVANNI MARIA ARTUSI, an ecclesiastic of Bologna, of whom mention has already been made in the course of this work, was the author of an excellent treatise entitled '*L'Arte del Contraponto Ridotta in Tavole*,' published in 1586, of which an account has herein-before been given, and also of a discourse which he entitles '*L'Artusi, overo delle Imperfettioni della moderna Musica, Ragionamenti dui*,' printed at Venice in the year 1600.

The latter of these two treatises is a dialogue, which the author introduces with the following relation:—

'Upon the arrival of Margaret queen of Austria at Ferrara, in 1598, with a noble train, to celebrate a double marriage between herself and Philip III. of Spain, and between the archduke Albert and the infanta Isabella the king's sister; soon after the nuptials they visited the monastery of St. Vito, where, for the entertainment of their royal guests, the nuns performed a concert, in which were heard cornets, trumpets, violins, bastard viols, double harps, lutes, flutes, harpsichords, and voices at the same time, with such sweetness of harmony, that the place seemed to be the mount of Parnassus, or Paradise itself.'

On this occasion two of the auditors, who happened to meet there, and were greatly pleased with the performance, enter into a conversation on the subject of music in general. It is needless to follow the in-

terlocutors through the whole of the dialogue, but it may be taken for granted that, notwithstanding the form it bears, it contains the sentiments of Artusi himself, who, after delivering some very obvious rules for the ordering of a musical performance, whether vocal or instrumental, such as the choice of place, of instruments, of voices, and lastly, of the compositions themselves, declares himself to the following purpose: and speaking first of the Cornet, he says that the tone of that instrument depends greatly upon the manner of tonguing it, concerning which practice he delivers many precepts, which at this time it would be of very little use to enumerate.

The cornet is an instrument now but little known, it having above a century ago given place to the hautboy; Artusi seems to have held it in high estimation; his sentiments of it will be best delivered in his own words, which are these:—

'To give the best tone, the performer on the cornet should endeavour to imitate the human voice; for no other instrument is so difficult to attain to excellence on as this; the trumpet is sounded by the breath alone; the lute by the motion of the hands; the harpsichord and the harp may be attained by long practice; but the cornet requires the knowledge of the different methods of tonguing, and the changes to be made therein according to the quality of the several notes; a proper opening of the lips joined to a ready finger attained by long habit; all these excellencies were possessed by Girolamo da Udine of Venice, and other eminent performers on that instrument who flourished formerly in Italy.'

In his observations on other instruments he speaks to this purpose: the different construction of instruments will occasion a diversity in their sounds; first, in respect of the matter of which they are formed; secondly, of the chords of some, and the pipes of others; and, thirdly, to speak of stringed instruments only, by reason of the manner in which the chords are struck. Under these several heads he makes the following remarks, viz., that the lute being a larger instrument than the guitar, the sound thereof is more diffused; as a proof whereof he says, that a string of the one being put on the other, will produce a change of tone derived from the effect of the different instrument; and that for the same reason, a gut string being put upon a harpsichord, the sound thereof is lost, or scarce heard. Farther, that a silver string will produce a sound more or less sweet, according to the quality and degree of the alloy with which the metal is tempered; and that if a string of Spanish gold, the alloy of which is harder than that of the Venetian, be put on a guitar, it will render a sweet, but a string of pure gold or silver an unpleasant sound. As to pipes, he says there can be no doubt but that leaden ones have a sweeter tone than those of tin or any harder metal. And as to the percussion of chords, he says that if a chord of metal or gut be struck with the finger, it must produce a sweeter sound than if struck by any thing else. These observations demonstrate the imperfections of instruments, though in general they are but little attended to.

Farther, the different tuning or temperature of

instruments is such, that oftentimes one interval is sounded for another; and frequently in the diatonic genus one performer will observe the syntonous division of Ptolemy, another that of Aristoxenus; and this also, says this author, is an evidence of the imperfection insisted on.

He cites from Ptolemy a passage, wherein it is asserted that in wind-instruments no certainty of sound can be depended on; and another from Aristoxenus to the same purpose, but more general, as applying to all instruments whatsoever.

From hence he takes occasion to consider the instruments of the moderns, and the temperaments of each species or class; the first he makes to consist of such as are tempered with the tones equal and the semitones unequal, as the organ, harpsichord, spinnet, monochord, and double harp. The instruments of the second class, under which he ranks such as are altered or attempered occasionally, are the human voice, trombone, trumpet, rebec, cornet, flute, and dulzain.* In the third class, consisting of instruments in which both the tones and semitones are equally divided, are placed the lute, viol, bastard viol, guitar, and lyre.

From this arrangement of instruments, and a comparative view of the temperaments proper to each, Artusi draws a conclusion, which, if not too refined, appears to be very judicious, namely, that in music in consonance the instruments of the first and third class ought never to be conjoined.

In the course of the dialogue Artusi puts into the mouth of one of the interlocutors this question, 'Had the ancients music in consonance, or not?' To this the answer is, 'I deny that the ancients had the knowledge of all those consonances that we make use of, as clearly may be read in Aristoxenus, lib. I. in Ptolemy, lib. I. cap. x. and in Euclid, who says, "Sunt consona diatessaron, diapente, diapasen et similia; dissona autem sunt ea quæ minora, quam diatessaron, ut diesis, semitonium, tonus, sesquialter, et ditonus." From these authorities it must be believed that the ancients had not the imperfect consonances, the thirds, and sixths; or if they had any knowledge of them, they never used them, but reputed them discords.'

And touching the comparative excellence of the ancient and modern music, Artusi delivers his sentiments to this purpose:—

'The music of the ancients being more simple, caused a greater impression on the mind than can be effected by that of the moderns; which consisting in a variety of parts, whereof some are grave and others acute; some proceeding by a slow, others by

'a quick motion, divides the attention, and keeps the mind in suspense: so that although it may be said that the music of the moderns consists in a richer and fuller harmony than that of the ancients, it is inferior to it in respect of the melody, and its power over the human mind.'

In the course of this dialogue, Artusi takes occasion to celebrate Cypriano De Rore, whom he styles a skilful composer, and the first that accommodated judiciously words to music, a practice which before his time was but very little understood by musicians.

Towards the end of the first of the *Ragionamenti* is a madrigal for two voices of Adriano Willaert, copied as Artusi testifies, from the writing of the author himself, and closing with the interval of a seventh, though to appearance the cadence is in the diapasen.

To this madrigal is subjoined a letter printed from the original manuscript of Giovanni Spataro of Bologna, dated 9th September, 1524, purporting to be a criticism on it, wherein the author, after many honourable expressions in commendation of Messer Adriano and his works, censures him for having, by an unwarrantable kind of sophistry, made the madrigal in question, by the use of the flat signature, to appear different from what it really is.

Spataro's letter is replete with musical erudition. Artusi says that it came from a good school, and that the author was a most acute musician. It is followed by reflections of Artusi on what he calls *Musica finta*, in Latin *Musica ficta*, or feigned music, that is to say, that kind of music in which a change of the intervals is effected in various instances, by the use or application of the flat signature: Artusi seems to be no friend to this practice, and censures the multiplication of the transposed keys beyond certain limits.

He then proceeds to relate the dispute between Nicola Vicentino and Vincentio Lusitano in 1551. The latter maintaining that the then modern scale was purely diatonic, and the other asserting that the same consisted of a mixture of the chromatic and enarmonic genera; Artusi seems not to have attended to the concessions made by Vincentio Lusitano, which are so much the more worthy of note, as they were made after a determination in his favour, and nevertheless adopts his first opinion, and accordingly approves of the sentence against Vicentino by the judges in the controversy, Bartolomeo Esqobedo, and Ghisilino D'Ancherta.

CHAP. XCII.

In the second of the *Ragionamenti* are contained the censures of Artusi on a madrigal in five parts by an anonymous author, which, though it had been much applauded by the vulgar, is by him shown to be very faulty.

Speaking of the ancient modes, and of the designation of each of them by Euclid and Ptolemy, he remarks that these two writers differ in the order of the modes, though they agree both in the number and construction of them; for that in those of Ptolemy the tones and semitones in the ascending, succeed in the same order as those of Euclid do in the descending series.

* The Dulzain, otherwise called the Dulcino, is a wind-instrument, used as a tenor to the hautboy. Brossard calls it the Quart Fagotto; and adds, that it is a small bassoon. That it is a kind of hautboy appears from a passage in Don Quixote. In the adventure of the puppet-show, the boy, who is the interpreter, desires the spectators to attend to the sound of the bells which rang in the steeples in the mosques of Sanuenna to spread the alarm of Melisendra's flight. Peter, the master of the show, is all the while behind ringing the bells, upon which Don Quixote calls out, 'Master Peter, you are very much mistaken in this business of the bells: for you are to know that among the Moors there are no bells, and that instead of them they make use of kettle-drums, and a kind of Dulzaynes, like our Chirimias.' CHIRIMIA in the Spanish dictionaries is interpreted by the Latin Tibicen, i. e. and Chirimias is by Jarvis properly enough translated Waits, that is to say hautboys; though, by a mistake arising from his want of skill in music, he has rendered the word Dulzaynes, Dulcimers.

Notwithstanding the several essays towards a temperate which are to be met with in the writings of Artusi, it is clear that he was not of the Aristoxenean sect of musicians; for of Aristoxenus himself he says that he is 'una discordante discordia,' and that among his followers there is infinite confusion.

He says that all the moderns are at variance with respect to the number, the order, and situation of the modes; and that neither Odo, Guido Aretinus, nor Jacobus Faber Stapulensis, seem to have understood the meaning of Boetius, which he ascribes to the many errors in the manuscript copies.

Artusi seems to agree with Glareanus in making the modes to be twelve in number, but he differs from him in his designation of them. By what artifice the modes are made to exceed the species of diapason, has already been mentioned; and, as to the difference between the modes of Glareanus and Artusi, the subject is so uninteresting, that it merits very little attention at this day.

Towards the close of this treatise, Artusi observes that every cantilena is mixed and composed of two modes, that is to say, the authentic and the plagal respectively in each of the several species of diapason; and that a cantilena, by being made to sing both backward and forward, may consist of four modes; and of this he gives an example in that enigmatical madrigal composed by Costanzo Porta, inserted in book V. chap. XLIV. of this work, saying that it is a fine and new invention.

In the year 1603, Artusi published a second part of this work, the occasion whereof is related in the preface, and is as follows: 'One Francesco Patricio, in the year 1586, had written a treatise intitled "Della poetica deca historiale, deca disputata," wherein discoursing of music and poetry, he takes occasion to speak of the genera of the ancients, but in a way that in the opinion of some was liable to exception.'

This book was severely censured by Hercole Bottrigaro in a discourse entitled 'Il Patricio, ovvero de tetracordi armonici di Aristosseno, parere e vera demonstratione dell' Illustré Signor Cavaliere Hercole Bottrigaro.' In Bologna, 1593, in quarto; and Patricio's book coming also to the hands of Annibale Meloni, a musician of Bologna,* he too published remarks on it entitled 'Il Desiderio di Alemanno Benelli,' a name formed by the transposition of the letters of the name Annibale Meloni; in it are some reflections, rather on the doctrines than the character of Francesco Patricio, wherefore he being dead, Artusi undertook to vindicate him from the calumnies of the one and the insinuations of the other of these his adversaries.

The conduct of Artusi in the management of this controversy is somewhat singular; for although the second part of the treatise *Delle Imperfettioni*, and more especially the *Considerationi Musicali*, printed at the end of it, are a defence of Patricio, and an examen of Bottrigaro's book, *Il Patricio*, in which many errors contained in it are pointed out, and

most strongly marked; yet to this very same Bottrigaro, the adversary of Patricio, and the aggressor in the dispute, does Artusi dedicate his book, and that in terms so equivocal, that it is not easy to discover that he means at once to flatter and revile him. In order to do this consistently, he very artfully affects to consider Bottrigaro's book *Il Patricio* as the work of an anonymous writer, calling him 'l'Autor del parere;' and sticks not to say that in calumniating Patricio he does but bark at the moon.

Artusi's book, besides that it is a defence of Francesco Patricio, contains also an enquiry into the principles of some modern innovators in music: of these, one named Ottavio Ottusi, conceiving that the censures of Artusi were meant to reach himself, wrote a letter to Artusi, wherein he advances the following absurd positions, viz., that the discord of the seventh is sweeter to the ear than the octave; that the seventh may move up to the octave, and the fourth into the fifth; the third into the fourth, and the fifth into either of the sixths. This letter produced a controversy, which clearly appears to have terminated in favour of Artusi.

To this second part of the treatise '*Delle Imperfettioni della moderna musica*,' are added '*Considerationi musicali*;' these contain the author's sentiments of Patricio and his work, as also the objections of his opponent. They are delivered with a becoming zeal for the honour of his memory, and in terms, which though they indicate a respect for the rank and station in life of Signor Cavaliere Hercole Bottrigaro, sufficiently shew how far he ventured to differ from him in opinion.

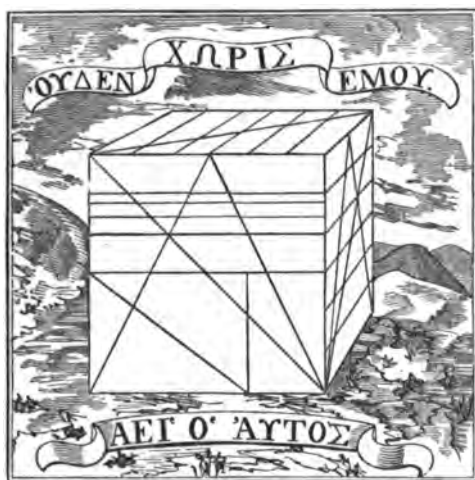
Nor did Artusi rest the dispute here: Annibale Meloni, it seems, was his friend; Meloni had shewn him his book *Il Desiderio*, but Artusi excused himself from perusing it, as not being willing to forward a publication that in the least reflected on the doctrines delivered by Patricio: he nevertheless entertained a high opinion of its author, as appears by what he says of him in the preface to the second part of his book *Delle Imperfettioni*; and after its publication in 1594, some remaining copies coming to his hands, he republished it in 1601, with a preface, in which he intimates an opinion then generally prevalent that Bottrigaro was the author of the book; and upon this he takes occasion to reproach him for arrogating to himself the merit of so excellent a work, and for not openly and publicly disclaiming all pretence to the honour of writing it.

The moderation of Artusi in his treatment of his adversary is very remarkable, for he blames him only for suffering an opinion to prevail that he was the author of *Il Desiderio*; but he might have carried the charge against him much farther; for Bottrigaro having got possession of the manuscript at a time when Annibale Meloni consulted him about it, he caused a copy to be made of it, and had the effrontery to publish it as his own; there is now extant an impression of it with this title '*Il Desiderio; ovvero de' concerti di vari stromenti musicali, dialogo di musica di Ercole Bottrigari*.' In Bologna per il Bellagamba, 1590, in quarto.†

† N. Haym. *Notizia de' libri rari nella lingua Italiana*. Lond. 1726, octavo, pag. 289.

* Annibale Meloni was a man of considerable learning. Artusi, in the preface to his second part of the treatise *Delle Imperfettioni*, mentions a certain demonstration of some of the problems of Aristotle, and other works of his writing. For his profession we are to seek, though Bottrigaro styles him 'Molto Mag. M. Annibale Melone Decano de Musica ordinarii Illustriss. Signoria di Bologna.'

In the year 1604, Artusi published at Bologna a small tract in quarto, entitled 'Impresa del molto 'R. M. Gioseffo Zarlino da Chioggia.' It seems that Zarlino, some time before his decease, agreeably to the practice of many learned men in all faculties, had chosen for himself a device or impress adapted to his profession, and alluding to that method of reasoning which he had pursued in the course of his studies for demonstrating the harmonical ratios. This impress, which probably he might make the subject of an intaglio, or otherwise assume, was a cube, on which were drawn a variety of lines intersecting each other, and forming angles in harmonical ratios, with this motto above, 'ΟΥΔΕΝ ΧΩΡΙΣ ΕΜΟΥ', that is to say, 'Nothing without me,' and underneath this, 'ΑΕΙ Ο ΑΥΤΟΣ' 'Always the same.'



The diagrams inscribed on the three apparent sides of the above figure are such as Zarlino, in the course of his writings, had invented for the purpose of demonstrating the ratios of the consonances. Artusi's book is a commentary on the impress at large, with a formal declaration of the doctrines referred to by it; but from what has been said of the Helicon of Ptolemy, and the subsequent improvement of it, mentioned in the account herein-before given of Zarlino and his writings, the general import of these diagrams may be easily perceived.

The foregoing account of Bottrigaro and Artusi, and the controversy between them respecting Francesco Patricio, renders it necessary to speak of the treatise intitled *Il Desiderio*.

As to the book intitled *Il Desiderio*, it is a curious and entertaining dialogue on the concerts which at the time of writing it were the entertainment of persons of the first rank in the principal cities of Italy, particularly Venice and Ferrara. The interlocutors in it are Gratosio Desiderio, who, although the title of the book is taken from his name, seems to be a fictitious person, and the author himself under the name of Alemanno Benelli. In the course of the conversation, the principles of harmony, as delivered by the Greek and Italian writers, are investigated with great learning and ingenuity, with a view to establish a preference of the modern to the ancient

music. In support of his argument, the author recurs to that which is ostensibly the subject of his book, and speaks first of the concerts at Venice; next of those of the *Accademici Filarmonici* at Verona;* and, lastly, of those performed in the ducal palace at Ferrara, of which he gives a particular description; for after taking notice of the grandeur and elegance of the apartments, and particularly of that splendid room in which the concert was accustomed to be given, he relates that the duke had in his service a great number of singers with fine voices, and excellent performers on various instruments, as well foreigners as Italians; and that the instruments made use of in concert were the cornet, trumpet, dulzain, flutes of various kinds, the viol, rebec, lute, cittern, harp, and harpsichord, and these to a considerable number.

After this general account of the instruments, the author mentions certain others which himself saw at the palace of the duke, and were there preserved, some for their antiquity, and others in respect of the singularity of their construction; among these he takes notice of a curious organ, formed to the resemblance of a screw, with pipes of box-wood all of one piece, like a flute; and a harpsichord invented by Don Nicola Vicentino surnamed *Arcimusico*, comprehending in the division of it the three harmonic genera. He adds that the multitude of chords in this astonishing instrument rendered it very difficult to tune, and more so to play; and that for this latter reason the most skilful performers would seldom care to meddle with it: nevertheless, he adds, that Luzzasco, the chief organist of his highness, who it is supposed must have understood and been familiar with the instrument, was able to play on it with wonderful skill. He says that this instrument by way of pre-eminence was called the *Archicembalo*; and that after the model of it two organs were built, the one at Rome, by the order of the Cardinal of Ferrara, and the other at Milan, under the direction of the inventor Don Nicola, in or about the year 1575, who died of the plague soon after it was finished.

The author relates that the duke of Ferrara had many Italian and foreign musicians retained in his service; and a very large collection of musical compositions, in print and in manuscript, and a great number of servants, whose employment it was to keep the books and instruments in order, and to tune the latter. The principal director of the musical

* The *Accademia degli Filarmonici* was instituted first at Vicenza. The time when cannot be precisely ascertained; but appears by an instrument of a public notary, yet extant, that so early as the year 1565 the *Accademia degli Incatenati* was incorporated with it, after which the members, upon their joint application to the magistracy of Verona, obtained a grant of a piece of ground, whereon a sumptuous edifice was erected; to this the nobility and gentry of the city were used to resort once a week, and entertain themselves with music: about the year 1723 a theatre was added to the great hall for the performance of opera. *Walth. Lex. pag. 4.*

The academy above-mentioned is supposed to be the most ancient of the kind of any in Italy, but since the institution of it others have been established, which, as they will be occasionally spoken of hereafter, it may not be improper to give an account of here. And first it is to be noted that in the year 1622 a society was established at Bologna by Girolamo Giacobbi, called the *Accademia de' Filomusi*; the symbol of this fraternity was a little hill with reeds or canes growing on it, the motto 'Vocis dulcedine captant.' In 1633 another was instituted in the same city by Domenico Burnetti and Francesco Bertacchi, called the *Accademia de' Musici Filachisi*, having for its symbol a pair of kettle-drums, and for a motto 'Orbem demulcet attactu.' One of the two is yet subsisting, but it is uncertain which. *Ibid.*

performances was [Ippolito] Fiorino, maestro di cappella to his highness the duke.

Whenever a concert was to be performed at the duke's palace, circular letters were issued, requiring the attendance of the several performers, who were only such as had been previously approved of by the duke and Luzzasco; and after repeated rehearsals, was exhibited that musical entertainment, which, for order, exactness, and harmony, could not be equalled by any of the like kind in the world.

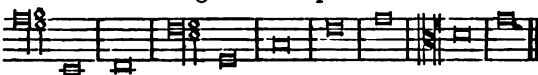
Meloni says that of the vocal music usually performed in this and other concerts in Italy, the canzones of the Flemish and French composers were some of the best. He speaks of a custom in Bologna, though it is common in most cities of Italy, Spain, and Portugal, viz., that of serenading or entertaining ladies and great personages with ambulatory concerts under their windows, and in the night; and, lastly, he celebrates for their skill in music, and exquisite performance on sundry instruments, the ladies of the duchess of Ferrara, and the nuns of St. Vito,* whom he resembles to the Graces.

CHAP. XCIII.

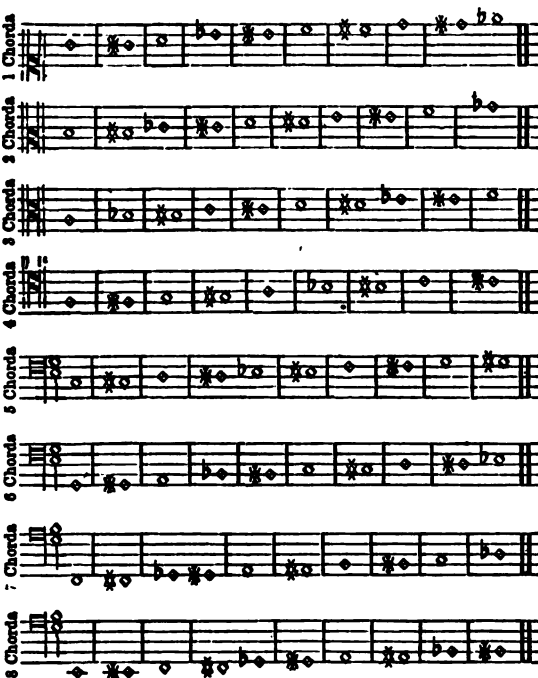
SOPIONE CERRETO, (*a Portrait*,) a Neapolitan, was the author of a treatise entitled 'Della prattica musica vocale, et strumentale,' quarto, 1601. This, though it appears to be an elaborate work, and promises great instruction to such as delight in music, contains little more respecting the science than is to be found in Boetius, Franchinus, Zarlino, Zaccane, and other of the Italian writers. It appears by this author that in his time instrumental music was arrived at great perfection in Italy, and more particularly at Naples, for he gives a copious list of composers and excellent performers on the lute, the organ, the viol, the guitar, the trumpet, and the harp, who flourished in his time, and were either natives of, or resident in that city.

In the eighth chapter of his fourth book the author intimates that he himself was a performer on the lute;

and, besides giving directions for the holding and touching it, he explains with great perspicuity the tablature of the Italians adapted to the lute of eight chords; and first, he gives the characters for time, which are no other than those described by Adrian le Roy, and which have already been exhibited. And after that the tuning as here represented:—



Then follows the succession of tones and semitones on each of the chords in this order:—



And after these, the tablature by figures according to the Italian manner, as here represented:—

8. Cord. C♯	♯	1	2	♯	3	4	5	♯	6	7	♯	8
	c		d	b	e	f	f	g	g			
7. Cord. D♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	b	e	f	f	g	g	g	a	b			
6. Cord. G♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	g	a	b	h	c	c	c	d	b			
5. Cord. C♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	c	d	♯	e	f	f	g	g	g			
4. Cord. F♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	f	g	g	a	b	h	c	c	c			
3. Cord. A♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	b	h	c	e	d	b	e	e	f			
2. Cord. D♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	b	e	f	f	g	g	g	a	b			
1. Cord. G♯	♯	1	2	♯	3	♯	4	5	♯	6	7	8
	g	a	b	h	c	c	c	d	b			

Cap. IX. of the same book treats of an instrument resembling a lute of seven chords, called by the

* These nuns are celebrated for their skill in music by Artusi, in the beginning of his discourse, 'Delle Imperfezioni della moderna musica.'

author Bordelletto alla Taliana; and cap. X. of another of the same kind, called the Lira in Gamba, having eleven chords, with their several tunings, and of the tablature proper to each, in figures.

Cap. XI. treats of the Viola da Gamba, an instrument, as the author remarks, proper to accompany the voice in singing. It appears that the ancient method of notation for this instrument among the Italians was by figures. This kind of notation was practised both by the Italians and Spaniards, and differs from the French tablature, which is by the letters of the alphabet: who was the inventor of it we are yet to learn; Vincentio Galilei explained and improved it; but, notwithstanding this, it has long since given way to the French, perhaps as being more legible and less intricate.

This book of Cerreto abounds with curious particulars relating to music, but it has been remarked that the language and style of it are very indifferent.

Besides the several persons herein-before particularly enumerated, there flourished in this century many very eminent masters, of whom little more is known than their general characters, arising either from their compositions, or their skill and exquisite performance on the organ: among the former these are highly celebrated, Giovanni Cavaccio of Bergamo, maestro di cappella di S. Maria Maggiore; Jacques Arcadelt, a Frenchman, a disciple of Josquin, and maestro di cappella to the Cardinal of Lorraine; Johannes Knefel, a German, maestro di cappella to the elector Palatine; Ludovicus Senfelius, born at Zurich, maestro di cappella to the elector of Bavaria; Antonio Scandelli, maestro di cappella at Dresden; Gio. Maria Rossi, of Brescia; Nicolaus Rostius, a native of Weimar, and master of music in the court of the elector Palatine; Gio. Battista Pinelli, a Genoese by birth, and mastro di cappella at Dresden. As are also these:—

Agresta, Agostino.
Angelini, Orazio.
Animuccia, Paolo.
Baccusi, Hippolito.
Bassani, Orazio.
Bellasio, Paolo.
Belli, Giulio.
Bellhaver, Vincenzo.
Bertani, Lelio.
Blotagrio, Guglielmo.
Blasius, Ammon.
Bonhomius, Petrus.
Casati, Girolamo.
Colombi, Gio. Bernardi.
Comis, Michele.
Conversi, Girolamo.
Corregio, Claudio.
Donati, Baldassare.
Duetto, Antonio.
Eremita, Giulio.
Faignient, Noë.
Farino, Francesco.
Fattorini, Gabriello.
Fella, Stefano.
Ferettili, Giovanni.
Fonteijo, Gio.
Gabrieli, Andrea.
Gastoldi, Giacomo.
Handl, Jacobus.

Ingegneri, Marc. Ant.
Laura, Dominico.
Leoni, Leon.
Lucatello, Gio. Batt.
Macque, Giov. de.
Mancini, Curtio.
Manenti, Giov. Pietro.
Marsolo, Pietro Maria.
Masorelli, Paolo.
Massanio, Tiburtio.
Molinaro, Simone.
Moscaglia, Giov. Batt.
Mosto, Gio. Batt.
Nasco, Giov.
Nenna, Pomponio.
Nodari, Gio. Paolo.
Nucetus, Flaminus.
Palma, Gio. Vincenzo.
Pace, Antonio.
Pesenti, Benedetto.
Pevernagius, Andreas.
Pizzoni, Giov.
Ponte, Giaches de.
Pordenone, Marc. Ant.
Prætorius, Hieronymus.
Quartiero, Pietro Paolo.
Quagliata, Paolo.
Reggio, Spirito.
Rossi, Salomon.

Rubiconi, Chrysostom.
Ruffo, Vincenzo.
Sabino, Hippolito.
Santini, Marsilio.
Scaletta, Orazio.
Scarabeus, Damianus.
Spongia, Francesco.
Spontone, Alessandro.
Stabile, Annibale.

Turnhout, Giov.
Utendahl, Alessandro.
Valcampi, Curtio.
Verdonck, Cornelius.
Vespa, Geronimo.
Violante, Giov. Franc.
Waelrant, Hubert.
Zoilo, Annibale.

Of organists, the following were some of the most eminent: Gioseffo Guammì, of Lucca; Ottavio Bariola, organist of Milan; and Annibale Patavina, of Venice; Johannes Leo Hasler, of Nuremberg; Jacobus Paix, a native of Augsburg, and organist of Lawingen.

Of these it is to be observed that they were for the most part natives of Italy, Germany, and Flanders; for it is strange to say, that, excepting England, those were almost the only countries in Europe in which music may be said to have made any considerable progress. Doni observes that Spain had in the course of a century produced only two men of eminence in music, namely, Christopher Morales and Franciscus Salinas; and among the French scarce any musicians of note are mentioned besides Jusquin de Prez, Jean Mouton, Crequillon, and Claude le Jeune.* In England, Tye, Tallis, Bird, Bull, and Dowland, were highly esteemed; and it is confidently asserted that in the general opinion they were equal to the best musicians of any country; and the same is said of Peter Phillips, an Englishman, organist to the archduke and duchess of Austria, Albert and Isabella, governors of the Netherlands, residing at Brussels; but of these, and other of our countrymen, mention will be made hereafter.

It has been already remarked, that during the last half of the sixteenth century, the madrigal was the species of vocal composition most practised and encouraged; and as singing was the usual entertainment of the well-bred of both sexes, and had not then given place to cards and games of chance; the demand for variety was so great as to excite an emulation in all that were qualified for it, to excel in this kind of composition; and innumerable were the collections of madrigals which about this time were given to the world by their respective authors. They were generally published in an oblong quarto size, with both the notes and words printed in a good character on letter-press types, and without bars; from such books as these it was held a disgrace for any person of rank or education not to be able to sing.†

* Jusquin de Prez is justly reckoned among the earliest of the French composers, but the science of counterpoint had been cultivated to some degree before his time; one Guillaume Guerson of Longueville, a town in Upper Normandy, was the author of a treatise printed at Paris by Michael Thoulouze, with this title, 'Utilissime musicales regule cunctis sinopere necessarie plani catus apilais cōtrapuncti rerū factarū tonorū et ardis accentuandi tam exēplartur quam practice.' [The Colophon after the word factarū adds 'seu organorum.'] The book bears no date, but from the style and character of it, it is conjectured to be nearly as ancient as the time of Franchinus.

† Castiglione requires of his courtier that he be able to sing his part at sight. Bandello, in one of his novels, speaking of an accomplished young man, says, 'Era il detto Giulio molto costumato e virtuoso, ed oltre le buone lettere, si dilettaua mirabilmente de la musica, cantava bene la sua parte e s'oua d'ogni strumento.' Novelle del Bandello, part II. Nov. xxv., and in Morley's Introduction, the reason given by Philomathes for applying to a master for instruction in music is as follows: 'Being at a banquet of master Sophobulus, supper being ended, and musicks

In consequence of this disposition in the public, such a profusion of vocal harmony was poured forth, as served rather to distract than oblige the votaries of the science; and it became necessary to direct their choice by a judicious selection of such compositions as were most worthy of their regard: to this end, one Melchior Borchgrevinck, organist to the king of Denmark, published at Copenhagen, in the year 1606, a collection of madrigals for five voices, entitled '*Giardino novo bellissimo de varii fiori musicali sceltissimi*,' in two parts, the latter whereof is dedicated to our king James I; and about the same time, four persons, namely, Pietro Phalesio, a bookseller of Antwerp, and Andrea Pevernage, Hubert Waelrant, and Pietro Philippi above-named, three excellent musicians, in a kind of emulation severally published a collection of madrigals with the following titles, *Musica Divina*, *Harmonia Celeste*, *Symphonia Angelica*, *Melodia Olympica*, with this uniform declaration of their contents in these words, '*Nella quale si contengono i piu eccellenti madrigali che hoggi di si cantino.*' They were printed for Phalesio, and sold at his shop, the sign of king David, in Antwerp.

These compositions were to words of Petrarch, Guarini, Tasso, Marino, Fulvio Testi, and other Italian poets; and in the memory of such as understood and admired music, a favourite madrigal held the place of a popular song; among other evidences to this purpose, a little poem of Sir Philip Sidney, printed with the sonnets at the end of his *Arcadia*, beginning '*Sleep baby mine,*' may be reckoned as one, as it is directed to be sung to the tune of '*Basciami vita mia,*' a fine madrigal of Noë Faignient, printed in the *Musica Divina*.

CHAP. XCIV.

OF English musicians, the first of note after the reformation of religion, and indeed of music itself, which had been greatly corrupted by the use of intricate measures, was JOHN MARBECK, of Windsor, a man to whom church-music has greater obligations than the world is sensible of; for notwithstanding the vulgar opinion that Tallis composed it, it is certain that the cathedral musical service of the church of England was originally framed by Marbeck, and that the musical notes to the *Preces*, *Suffrages*, and *Responses*, as they are at this day sung in choral service, were of his composition.

The history of this man has entitled him to a place in the Martyrology of the zealous and laborious John Fox, and is as follows:—

About the year 1544, a number of persons at Windsor, who favoured the Reformation, had formed themselves into a society; among them was Anthony Person, a priest, Robert Testwood, a singing-man in the choir of Windsor, a man in great estimation for his skill in music, and whose name occurs in Morley's Catalogue of eminent English musicians at the end

bookes, according to the custome, being brought to the table, the mistress of the house presented mee with a part, earnestly requesting mee to sing. But when, after manie excuses, I protested unfainedly that I could not, everie one began to wonder. Yes, some whispered to others, demanding how I was brought up. So that for shame of mine ignorance, I go now to seek out mine olde frinde Master Gnorimus, to make myself his scholler.

of his Introduction; the above-named John Marbeck, who by a mistake of bishop Burnet is also called a singing-man, but in truth was organist of the chapel of St. George at Windsor,* and one Henry Filmer, a tradesman of the same town. Upon intimation given that these persons held frequent meetings, Gardiner, bishop of Winchester, procured a commission from the king to search suspected houses in the town for heretical books;† upon which the four persons above-named were apprehended, and their books seized, among which were found some papers of notes on the Bible, and a Concordance in English, in the hand-writing of Marbeck. Upon his examination before the commissioners of the six articles touching these papers, he said, as to the notes, that he read much in order to understand the Scriptures; and that whenever he met with any exposition thereof he extracted it, and noted the name of the author;‡ and as to the Concordance, that being a poor man, he could not afford to buy a copy of the English Bible, which had then lately been published with notes by Thomas Matthews; and therefore had set himself to write one out, and was entering into the book of Joshua, when a friend of his, one Turner,§ knowing his industry, suggested to him the writing of a Concordance in English, but he told him he knew not what that meant, upon which his friend explained the word to him, and furnished him with a Latin Concordance and an English Bible; and having in his youth learned a little Latin, he, by the help of these, and comparing the English with the Latin, was enabled to draw out a Concordance, which he had brought as far as the letter L. This seemed to the commissioners who examined him a thing so strange, that they could not believe it. To convince them, Marbeck desired they would draw out any words under the letter M, and give him the Latin Concordance and English Bible, and in a day's time he had filled three sheets of paper with a continuation of his work, as far as the words given would enable him to do.|| The ingenuity and industry of Marbeck were much applauded, even by his enemies; and it was said by Dr. Oking, one of the commissioners who examined him, that he had been better employed than his accusers. However, neither his ingenuity nor industry could prevent his being brought to a trial for heresy, at the same time with the three other persons his friends and associates: Person and Filmer were indicted for irreverent expressions concerning the mass; the charge against Marbeck was copying with his own hand an epistle of Calvin against it, which it seems was a crime within the statute of the well-known six articles, and they were all four found guilty and condemned to be burnt, which sentence was executed on all except Marbeck, the next day after the trial.¶

Testwood had discovered an intemperate zeal in dissuading people from pilgrimages, and had stricken off with a key, the nose of an alabaster image of the

* Wood so describes him, vide *Fasti*, Oxon. anno 1550; and he is so styled at the end of a composition of his hereinafter inserted, taken from a MS. in the hand-writing of John Baldwin, a musician of Windsor which was completed in the year 1591. Nevertheless, Bishop Burnet calls him a singing-man. *Hist. Reform.* vol. I. pag. 325.

† Acts and Monuments, edit. 1641, vol. II. pag. 546.

‡ Ibid. 550. § Ibid. ¶ Ibid. 553.

Virgin Mary, which stood behind the high altar of St. George's chapel.* It is also related of him, that in the course of divine service one of the same chapel, named Robert Phillips,† singing, as his duty required, on one side of the choir, these words, 'O redemptrix et salvatrix,' was answered by Testwood singing on the other side, 'Non redemptrix nec salvatrix.†

For these offences, the four Windsor men, as they are called, were severally indicted, and by the verdict of a partial jury, composed of farmers under the college of Windsor, grounded on the testimony of witnesses, three of whom were afterwards convicted of perjury, in their evidence at the trial, they were all found guilty of heresy, and condemned to be burnt, which sentence was executed at Windsor on Person, Testwood, and Filmer the next day.§

It seems that the king, notwithstanding the severity of his temper, pitied the sufferings of these men, for at a time when he was hunting in Guildford park, seeing the sheriff and Sir Humfrey Foster, one of the commissioners that sat at the trial, together, he asked them how his laws were executed at Windsor, and upon their answering that they never sat on matter that went so much against their consciences as the trial of Person and his fellows, the king, turning his horse's head to depart, said 'Alas, poor innocents!'

But Marbeck being a man of a meek and harmless temper, and highly esteemed for his skill in music, was remitted to Gardiner, who was both his patron|| and persecutor, in order either to his purgation, or a discovery of others who might have contracted the taint of heresy; but under the greatest of all temptations he behaved with the utmost integrity and uprightness, and, refusing to make any discoveries to the hurt of others, he, through the intercession of Sir Humfrey Foster, obtained the king's pardon.

Having thus escaped martyrdom, he applied himself to the study of his profession, and, not having been required to make any public recantation, he indulged his own opinions in secret, without doing violence to his conscience, or giving offence to others, till the death of Henry VIII. which happened about two years after, when he found himself at liberty to make a public profession of his faith, as an evidence whereof he completed his Concordance, and published it in

* Acts and Monuments, edit. 1641, vol. II. pag. 543.

† Of this man, Fox says that he was so notable a singing-man, wherein he gloried, that wheresoever he came the longest song with most counter-voices in it should be set up at his coming. His name, spelt Phelipp, occurs as a gentleman of the chapel in the lists of the chapel establishment both of Edward VI. and queen Mary.

‡ Acts and Monuments, vol. II. pag. 544.

§ Ibid. 543.

|| It appears by sundry expressions of Gardiner to Marbeck, that he had an affection for him, possibly grounded on his great skill in his profession. Fox relates that at the third examination of Marbeck at Winchester-house, in Southwark, upon his appearance in the hall he found the bishop with a roll in his hand, and going toward the window, he called to him, and said, 'Marbeck, wilt thou cast away thyself?' upon his answering No, 'Yes,' replied the bishop, 'thou goest about it, for thou wilt utter nothing. What a devil made thee to meddle with the Scriptures? Thy vocation was another way, wherein thou hast a goodly gift, if thou diddest esteeme it.' 'Yes,' answered Marbeck, 'I do esteeme it, and have done my part therein according to that little knowledge that God hath given me.' 'And why the devil,' said the bishop, 'didst thou not hold thee there?' And when Marbeck confessed that he had compiled the Concordance, and that without any help save of God, the bishop said, 'I do not discommend thy diligence, but what shouldst thou meddle with that thing which pertaineth not to thee?' Acts and Monuments, edit. 1641, vol. II. pag. 548. These expressions, harsh as they were, seem to indicate a concern in Gardiner that Marbeck had brought himself into trouble.

1550: he wrote also the following other books, 'The Lives of holy Saints, Prophets, Patriarchs, and others,' quarto, 1574. 'A Book of Notes and Common Places with their Expositions, collected and gathered together out of the workes of divers singular writers,' quarto, 1581. 'The ripping up of the Pope's Fardel,' 1581. 'A Dialogue between Youth and Age;' and other books.¶

The history of Marbeck's troubles is given at large by Fox, who notwithstanding he was acquainted with him, and had the relation of his sufferings from his own mouth, in the first edition of his Acts and Monuments, published in 1562, instead of a confessor, has made him a martyr, by asserting that he actually suffered in the flames at Windsor with Person and the other two; which mistake, though he corrected it in the subsequent edition of his work,** exposed him to very severe censures from Cope, Parsons, and other Romish writers.††

The musical service thus framed by Marbeck, and, for aught that appears, without the least assistance from any of his profession, was published with this title, 'The Booke of Common Praier, noted.' The Colophon, 'Imprinted by Richard Grafton, printer to the kinges majestie, 1550, cum privilegio ad imprimendum solum,' with the name John Merbecke in the preceding page, to intimate that he was the author or composer of the musical notes, which are so very little different from those in use at this day, that this book may truly be considered as the foundation of the solemn musical service of the church of England.

A particular account of this curious work will be given hereafter, in the interim it is necessary to say that it was formed on the model of the Romish ritual; as first, there was a general recitatory intonation for the Lord's Prayer, the Apostles' Creed, and such other parts of the service as were most proper to be read, in a certain key or pitch: to the introitus, supplications, suffrages, responses, prefaces, postcommunions, and other versicles, melodies were adapted of a grave and decent form, and nearly as much restrained as those of St. Ambrose or Gregory; and these had a harmonical relation to the rest of the service, the dominant in each being in unison with the note of the key in which the whole was to be sung.

The abilities of Marbeck as a musician may be judged of by the following hymn of his composition.

¶ Vide Fasti, Oxon. anno 1550.

** Vol. II. printed in 1576, in which he says of Marbeck, 'he is yet not dead, but liveth, God be praised, and yet to this present singeth merrily, and playeth on the organs.'

†† To say the truth, Fox's zeal for the Protestant cause has very much hurt the credit of his history; as a proof of his lightness of belief, take the following story, which lord chief justice Coke once told of him. Fox in his Martyrology had related of one Greenwood, of Suffolk, that he had been guilty of perjury, in testifying before the bishop of Norwich against a martyr during the persecution in the reign of queen Mary; and that afterwards he went home to his house, and there by the judgment of God his bowels rotted out of his belly, as an exemplary punishment for his perjury. A priest, who had newly been made parson of the parish where Greenwood lived, and was but little acquainted with his parishioners, preaching against the sin of perjury, cited this story from Fox, mentioning Greenwood by name, who was then in the church listening attentively to the sermon: the man, extremely scandalized by so foul an aspersion, brought his action against the parson, which was tried at the assizes before Anderson, who ruled that the action lay not, inasmuch as the words were not spoken with a malicious intent, but merely to exemplify the divine vengeance for so heinous a sin. Rolle's Abridgm. 87. Pl. 5.



A QUEENE ce - les - ti - al, as this daye
A VIRGINE and Mo - - - ther, a QUEENE ce - les - ti - al, as this daye
A VIRGINE and Mo - - - ther, a QUEENE ce - les - ti - - - al, as this

mak - eth ex - em - pli - fi - ca - ci - on, bare our Sa - - vi - our, our Sa - - vi -
mak - eth ex - em pli - - fi - ca - - - ci - on, bare our
daye mak - eth ex - em - pli - fi - ca - ci - on, bare our Sa - vi - our

our Christ the Lord im - pe - ri - al, the Lord . . . im - pe - ri - - al,
Sa - - vi - our Christ the Lord im - pe - ri - - - -
Christ the Lord im - pe - ri - al, im - pe - - - ri - al, who suff -

who suff - - - 'red death for our sal - va - ci - on, it pleased him so to
al who suff - - 'red death for our sal - va - ci - on, it pleased him so to
- - 'red death for our sal - va - ci - on, it pleas - ed him so to

do for our transgres - - - si - on, wherefore
do . . . for our transgres - - - si - on, wherefore with
do for our transgres - si - on, trans - gres - - - si - on, where -

with meek de - vo - ci - on sing we in the ho - nor of his in - car - na - -
meeke de - vo - ci - on sing we in the ho - nor of his incar - na -
- fore with meek de - vo - ci - on sing we in the ho - nor of his in - car - na - -

ci-on. A . . . Mayde im - ma -
 ci - on. A . . . Mayde im - ma - cu - late,
 ci - on. A Mayde im - ma - cu - late, of all
 cu - late, of . . all women the flo - ure, hath borne Christ Je - su our Sa - vi-our, our
 of all women the flo - ure, hath borne Christ Je - su .
 wo - men the flo - ure, hath borne Christ Je - su . our Sa - vi - our, .
 Sa - vi - our, hath borne Christ Je - su our Sa - vi - our.
 our Sa - vi - our, hath borne Christ Jesu our Sa - vi - our.
 hath borne Christ Je - su our Sa - vi - our.

JOHN MARBECK, ORGANIST OF WINDSOR.

CHAP. XCV.

CHRISTOPHER TYE, born at Westminster, and brought up in the royal chapel, was musical preceptor to prince Edward, and probably to the other children of Henry VIII. In the year 1545 he was admitted to the degree of doctor in music at Cambridge; and in 1548 was incorporated a member of the university of Oxford; in the reign of queen Elizabeth he was organist of the royal chapel, and a man of some literature. In music he was excellent; and notwithstanding that Wood, speaking of his compositions, says they are antiquated, and not at all valued, there are very few compositions for the church of equal merit with his anthems.

In an old comedy or scenical history, whichever it is proper to call it, with the following whimsical title, 'When you see me you know me,' by Samuel Rowley, printed in 1613, wherein are represented in the manner of a drama, some of the remarkable events during the reign of Henry VIII., is a conversation between prince Edward and Dr. Tye on the subject of music, which for its curiosity is here inserted:—

'Prince. Doctor Tye,
 'Our musick's lecturer? Pray draw near: indeed I
 'Take much delight in ye.

'Tye. In musicke may your grace ever delight,
 'Though not in me. Musicke is fit for kings,
 'And not for those know not the chime of strings.

'Prince. Truly I love it, yet there are a sort
 'Seeming more pure than wise, that will upbraid it,
 'Calling it idle, vaine, and frivolous.

'Tye. Your grace hath said, indeed they do upbraid
 'That tearme it so, and those that doe are such
 'As in themselves no happy concords hold,
 'All musicke jarrs with them, but sounds of good;
 'But would your grace awhile be patient,
 'In musicke's praise, thus will I better it:
 'Musicke is heavenly, for in heaven is musicke,
 'For there the seraphins do sing continually;
 'And when the best was born that ever was man,
 'A quire of angels sang for joy of it;
 'What of celestial was revealed to man
 'Was much of musicke: 'tis said the beasts did worship
 'And sang before the deitie supernall;
 'The kingly prophet sang before the arke,
 'And with his musicke charm'd the heart of Saul:
 'And if the poet fail us not, my lord,
 'The dulcet tongue of musicke made the stones
 'To move, irrationall beasts and birds to dance.
 'And last the trumpets' musicke shall awake the dead,
 'And clothe their naked bones in coates of flesh,
 'T' appeare in that high house of parliament,
 'When those that gnash their teeth at musicke's sound,
 'Shall make that place where musicke nere was found.
 'Prince. Thou givest it perfect life, skilful doctor;
 'I thanke thee for the honour'd praise thou givest it,
 'I pray thee let's heare it too.

'Tye. 'Tis ready for your grace. Give breath to
 'Your loud-tun'd instruments.

'Loud musicke.

'Prince. 'Tis well: methinkes in this sound I prove
 'A compleat age,
 'As musicke, so is man govern'd by stops
 'And by dividing notes, sometimes aloft,
 'Sometimes below, and when he hath attaind

'His high and lofty pitch, breathed his sharpest and most
'Shrillest ayre; yet at length 'tis gone,
'And fells downe flat to his conclusion. [*Soft music.*]
'Another sweetnesse and harmonious sound,
A milder straine, another kind agreement;
'Yet 'mongst these many strings, be one untun'd,
'Or jarreth low or higher than his course,
'Nor keeping steddie meane amongst the rest,
'Corrupts them all, so dooth bad man the best.
'Tye. Ynough, let voices now delight his princely eare.

'A song.

'Prince. 'Doctor I thank you, and commend your
'I oft have heard my father merrily speake [cunning,
'In your high praise; and thus his highnesse saith,
'England one God, one truth, one doctor hath
'For musickes art, and that is Doctor Tye,*
'Admired for skill in musick's harmony.

'Tye. Your grace doth honour me with kind acceptance,
'Yet one thing more I do beseech your excellence,
'To daime to patronize this homely worke,
'Which I unto your grace have dedicate.

'Prince. What is the title?

'Tye. The Actes of the holy Apostles turn'd into verse,
'Which I have set in several parts to sing:
'Worthy acts and worthily in you remembred.

'Prince. I'll peruse them, and satisfy your paines.
'And have them sung within my father's chapel.†

* At the time when Farinelli was in England, viz., about the year 1735, an exclamation of the like kind, and applied to that celebrated singer, gave great offence; he was singing in the opera, and as soon as he had finished a favourite song, a lady from the boxes cried out aloud, 'One God, one Farinelli.' Mr. Hogarth has recorded this egregious instance of musical enthusiasm, in his *Rake's Progress*, plate II. by representing Farinelli as seated on a pedestal, before which is an altar, at which a number of ladies are kneeling and offering to him, each a flaming heart; from the mouth of the foremost of these enraptured devotees issues a label with the words 'One G—d, one Farinelli.'

† In another part of this old comedy Cranmer and Tye appear, and are met by one young Browne (supposed to be the son of Sir Anthony Browne, master of the horse to Henry VIII. and one of his executors) with the prince's cloak and hat; Cranmer enquires of him what has become of the prince, and is told that he is at tennis with the marquis of Dorset. Upon which follows this dialogue:—

Cranmer. Goe beare this youngest to the chappell straight,
And bid the maister of the children whippe him well,
The prince will not learne, Sir, and you shall smart for it.

Browne. O good my lord, I'll make him ply his booke to-morrow.

Cranmer. That shall not serve your turne. Away I say. [*Exit.*]
So Sir, this policie was well devised: since he was whipt thus
For the prince's faults
His grace hath got more knowledge in a moneth,
Than he attained in a year before;
For still the fearful boy, to save his breech,
Doth hourly haunt him whereso'ere he goes.

Tye. 'Tis true my lord, and now the prince perceives it,
As loath to see him punish for his faults,
Plies it of purpose to redeeme the boy.

Upon which passage it is observable that there appears by an extract from the *Liber Niger*, inserted in a preceding chapter, to have been in the royal household two distinct masters, the one called Master of Song, whose duty it was to teach the children of the chapel singing; the other a Master of the Grammar-school, who taught them also, and probably other children in the palace, the rudiments of the Latin tongue; and as Browne does not appear to be a child of the chapel, it seems as if Cranmer meant to send him for correction, not to the master of the children properly so called, i. e. the master of song, but to the master of the grammar-school.

It will doubtless seem very strange, seeing he had not been guilty of any fault, that Browne should be whipt at all, but Cranmer's order may be accounted for. The practice of whipping the royal children by proxy had probably its rise in the education of prince Edward, and may be traced down to the time when Charles the First was prince. Besides Browne here mentioned, it appears that the prince had another proxy for correction, namely, Barnaby Fitzpatrick, a very ingenious and accomplished youth, who became the founder of a noble family of that name in Ireland. He is frequently mentioned in the journal of king Edward VI. by the name of Mr. Barnaby; and in Fuller's *Worthies*, Middlesex, pag. 179, are several letters from the king to him when upon his travels, containing directions for his conduct, and many expressions of affection and concern for his welfare. Burnet, in his account of Mr. Murray of the bed-chamber, Hist. of his own Times, vol. I. pag. 244, says he was whipping-boy to king Charles I. In the *Spectator*, No. 313, is a story somewhat to this purpose of Mr. Wake, father to the archbishop of that name. A schoolfellow of his, whom he loved, had committed a fault,

The Acts of the Apostles, mentioned in the foregoing dialogue, were never completed, but the first fourteen chapters thereof were in 1553 printed by Wylliam Seres, with the following quaint title:—

'The Actes of the Apostles, translated into Eng-
'lyshe metre, and dedicated to the kynges moste
'excellent maiestye by Christofer Tye, Doctor in
'musyke, and one of the gentylnen of hys graces
'moste honourable Chappell, wyth notes to eche
'Chapter, to syng and also to play upon the Lute,
'very necessarye for studentes after theyr studye, to
'fyle theyr wyttes, and alsoe for all Christians that
'cannot syng to reade the good and Godlye storyes
'of the lives of Christ hys Apostles.'

The dedication is 'To the vertuous and godlye
'learned prynce Edward the VI.' and is in stanzas
of alternate metre, of which the following may serve
as a specimen:—

* * * * *

'Your grace may note fro tyme to tyme

'That some doth undertake

'Upon the Pfalmes to write in ryme,

'The verse pleafaunt to make.

'And some doth take in hande to wryte

'Out of the booke of Kynges,†

'Because they fe your grace delyte

'In fuche like godlye thynges.

'And laft of all, I youre poore man

'Whofe doinges are full bafe,

'Yet glad to do the best I can,

'To geue unto your grace,

which Wake took upon himself, and was whipped for at Westminster school. Mr. Wake was a cavalier, and had borne arms under Penruddock and Grove in the West, and being taken prisoner, was indicted for high-treason against the commonwealth, at Exeter, and after a short trial convicted. It happened that the judge of assize who presided in court was the very person for whom Mr. Wake had been whipt when a school-boy, and recollecting his name and face, he asked him some questions, the answers to which convinced him that he was about to pass sentence on one to whom he was indebted for a very singular instance of friendship, the reflection on which inspired him with such a sense of gratitude, that he rode immediately to London, and by his interest with the Protector procured his pardon. It is to Dr. Grey's edition of *Hudibras*, vol. I. pag. 392, in not. that we are indebted for the name of the gentleman; and as Penruddock in the course of the trial takes occasion to mention that he sees Judge Nicholas upon the bench, there is very little doubt but that he was the judge to whom the story refers. See the *State Trials*, vol. II. pag. 260.

† Thomas Sternhold was the first that attempted a version of the Psalms in English. He did to the number of about forty of them: the rest in the printed collection used in churches were afterwards translated by John Hopkins, William Whittingham, Thomas Norton, and others. Sternhold's version was first published in the year 1549.

In the same year was published a version of the Penitential Psalms by Sir Thomas Wyatt, and in the year after 'Certayne Psalmes chosen out of the Psalter of David, and drawen furth into English meter by William Hunnis, servant to the ryght honorable Sir William Harberde, knight.' This William Hunnis was a gentleman of the chapel, temp. Edward VI. and upon the death of Richard Edwards, in 1566, was appointed master of the children. He died June 6, 1597, and was succeeded by Nathaniel, afterwards Dr. Giles. Cheque-book of the royal chapel. Farther mention of him will be made hereafter.

In the year last above-mentioned, viz., 1550, were also published 'Certayn chapters taken out of the proverbes of Solomon, with other chapters of the holy scripture, and certayne Psalmes of David, translated into English metre by John Hall. Whych Proverbes of late were set forth, imprinted, and untruey entitled to be the doynges of Mayster Thomas Sternhold, late grome of the kynges maiesties robes, as by thys cōpye it may be perceived, MDL.' The chapters above-mentioned are the sixth of the book of Wisdom called Sapientia; the ninth of Ecclesiasticus, and the third of the second epistle of St. Paul to the Thessalonians: the Psalms are Psalm xxi. xxiii. liii. lxiv. cxl. cxlii. cxliii. and cxliv.

The whole Psalter was translated into English metre by Dr. Matthew Parker, afterwards archbishop of Canterbury, and printed by John Day about the year 1560. The book is very little known, and is supposed to have been printed only for presents. An account of it will be given hereafter.

The passage to which this note refers has a plain allusion to these parts of scripture thus rendered into metre, and to a version of part of the book of Kings, which has escaped a diligent enquiry. In prosecution of this design of turning select portions of scripture for the purpose of singing them in churches, Dr. Tye verified some chapters of the Acts of the Apostles, and set them to musical notes as above is related.

'Haue thought it good nowe to recyte
'The stories of the actes
'Euen of the twelve, as Luke doth wryte,
'Of all their worthy factes.

* * * * *
'Unto the text I do not ad,
'Nor nothyng take awaye;
'And though my style be grosse and bad,
'The truth perceyue you maye.

'And yf your grace shall in good parte
'My symple worke so take,
'My wyttes to this I will conuart
'All vayne thynges to forsake.

'My callinge is another waye,
'Your grace shall herein fynde,
'By notes set forth to syng or playe,
'To recreate the mynde.

'And though they be not curious,
'But for the letter mete,
'Ye shall them fynde harmonious,
'And eke pleasaunt and swete.

'That such good thynges your grace might moue
'Your lute when ye assaye,
'Instede of songes of wanton loue
'These stories then to playe.*

'So shall your grace please God the Lorde,
'In walkyng in his waye,
'His lawes and statutes to recorde
'In your heart nyght and daye.

'And eke your realme shall flourish styll,
'No good thyng shall decaye:
'Your subiectes shall with right good wyll
'These wordes recorde and faye,

'Thy lyfe, O kynge, to us doth shyne
'As Gods boke doth thee reache:
'Thou dost us fede with such doctrine
'As Christe's elect dyd preache.

* * * * *

Here follow the two initial stanzas of the fourteenth chapter of the version of the Acts of the Apostles, with the music by Dr. Tye. In the original the author has given the music in separate parts, but here it is in score.

FOUR IN TWO. TWO IN ONE.

IT chaun-ced in I - co - - ni - um, as
IT chaunced in I co - - ni - um, as they oft
IT chaun-ced in I - co - ni - um, as they oft
IT chaunced in I - co - - ni - um, as they oft tymes dyd
they oft tymes dyd use, To - ge - ther they in - to dyd cum the Si - na - goge of
tymes dyd use, To - ge - ther they in - to dyd cum the Si - na - goge of Jues, where
tymes dyd use, To - ge - ther they in - to dyd cum the Si - na - goge of
use, To - ge - ther they in - to dyd cum the Si - na - goge of Jues,
Jues, where they dyd preache and one - - lye seke God's grace then to atcheve, That they so spake
they dyd preache . . and one - - lye seke God's grace then to atcheve, That they so spake to . .
Jues, where they dyd preache and one - lye seke God's grace then to at - cheve, That
where they dyd preache and one - lye seke God's grace then to at - cheve, That they so

* This stanza, were other evidence wanting, would be a proof that the king played on the lute.

to . . . Jue and Greke, that manye dyd be - leve, that manye dyd be - leve.
 Jue and Greke, That manye dyd be - leve, that manye dyd . . be - leve, be - leve.
 they so spake to Jue and Greke, That manye dyd be - leve, be - leve.
 spake to Jue and Greke, That many dyd be - - leve, . . . be - leve.

DOCTOR CHRISTOPHER TYE.

The Acts of the Apostles set to music by Dr. Tye, were sung in the chapel of Edward VI. and probably in other places where choral service was performed; but the success of them not answering the expectation of their author, he applied himself to another kind of study, the composing of music to words selected from the Psalms of David, in four, five, and more parts; to which species of harmony, for want of a better, the name of Anthem, a corruption of Antiphon, was given.

In Dr. Boyce's collection of cathedral music, lately published, vol. II. is an anthem of this great musician, 'I will exalt thee,' a most perfect model for composition in the church style, whether we regard the melody or the harmony, the expression or the contrivance, or, in a word, the general effect of the whole.

In the Ashmolean MS. fol. 189, is the following note in the hand-writing of Anthony Wood: 'Dr. Tye was a peevish and humoursome man, especially in his latter days, and sometimes playing on the organ in the chapel of Qu. Eliz. which contained much music, but little delight to the ear, she would send the verger to tell him that he played out of tune, whereupon he sent word that her ears were out of tune.' The same author adds that Dr. Tye restored church-music after it had been almost ruined by the dissolution of abbeys. Ibid.*

THOMAS TALLIS, one of the greatest musicians that this country ever bred, flourished about the middle of the sixteenth century. He is said to have been organist of the royal chapel to king Henry VIII. king Edward VI. queen Mary, and queen Elizabeth; but the inscription on his grave-stone warrants no such assertion; and it is certain that in the reigns of Edward VI. and queen Mary he was simply a gentleman of the chapel, and served for seven pence halfpenny per diem: under Elizabeth he and Bird were gentlemen of the chapel and organists.

The studies of Tallis seem to have been wholly devoted to the service of the church, for his name is not to be found to any musical compositions of songs, ballads, madrigals, or any of those lighter kinds of music framed with a view to private recreation. Of

the many disciples who had profited by his instruction, Bird seems to have possessed the greatest share of his affection, one proof whereof was a joint publication by them both of one of the noblest collections of hymns and other compositions for the service of the church that ever appeared in any age or country.

The work above alluded to was printed by Vautrollier in 1575, with the title of 'Cantiones quæ ab argumento sacræ vocantur quinque et sex partium, Autoribus Thoma Tallisio et Guilielmo Birdo, Anglis, serenissimæ reginæ majestati à priuato sacello generosis et organistis.'

This work was published under the protection of a patent of queen Elizabeth, the first of the kind that had ever been granted; and as the privileges contained in it are very singular, and serve to show what a share of royal favour they possessed, the substance thereof, as printed at the end of the book, is here inserted:—

'The extract and effect of the quenes maiesties letters patents to Thomas Tallis and William Birde, for the printing of musicke.

'Elizabeth by the grace of God quene of Eng-lande, Fraunce, and Irelande, defender of the faith, &c. To all printers, bokesellers, and other officers, ministers, and subjects greting, Know ye, that we for the especiall affection and good wil that we have and beare to the science of musicke, and for the advancement thereof, by our letters patents dated the xxii. of January in the xvii. yere of our raigne, have graunted full priviledge and licence unto our welbeloved servants Thomas Tallis and William Birde Gent. of our chappell, and to the overlyver of them, and to the assignes of them, and of the survivor of them, for xxi. yeares next ensuing, to imprint any and so many as they will of set songe or songes in partes, either English, Latine, French, Italian, or other tongues that may serve for musicke either in churche or chamber, or otherwise to be either plaid or soonge, And that they may rule and cause to be ruled by impression any paper to serve for printing or pricking of any songe or songes, and may sell and utter any printed bokes or papers of any songe or songes, or any bookes or quieres of such ruled paper, imprinted, Also we straightly by the same forbid all printers, bookesellers, subjects and strangers, other then as is aforesaid, to do any the premisses, or to bring or cause to be brought

* This manuscript, containing brief notes and memoirs of famous musicians, is in the hand-writing of Antony Wood. In the Catalogue of the Manuscripts in the Ashmolean Museum, published by Mr. Huddesford in 1761, it is thus numbered and described: '3568. 166. Some materials toward a history of the lives and compositions of all English musicians; drawn up according to alphabetical order in 210 pages by A. W.'

'out of any forren realmes into any our dominions, any songe or songes made and printed in any forren countrie, to sell or put to sale, uppon paine of our high displeasure, And the offender, in any of the premisses for every time to forfeit to us our heires and successors fortie shillings, and to the said Thomas Tallis and William Birde, or to their assignes, and to the assignes of the survivor of the, all and every the said bokes, papers, songe or songes, We have also by the same willed and commaunded our printers, maisters and wardens of the misterie of stacioners, to assist the said Thomas Tallis and William Birde and their assignes for the dewe execution of the premisses.*

Ames, in his *Typographical Antiquities*, pag. 353, takes notice that the dedication of this book to queen Elizabeth is very remarkable; he does not say for what, but it is obvious that he means for its composition and style, which is most pure and elegant Latin. The epistle dedicatory it is more than probable was written by Richard Mulcaster, the master of Merchant Taylor's school, an excellent grammarian, and a man of the first degree of eminence in his profession. There are prefixed to the book some Latin commendatory verses, with his name to them, in which is the following compliment to queen Elizabeth upon her skill in music:—

'Regia majestas, ætatis gloria nostræ;
'Hanc in deliciis semper habere solet,
'Nec contenta graves aliorum audire labores
'Ipsa etiam egregie voce manuque canit.'†

In this work is contained that admirable composition of Tallis, 'O sacrum convivium,' better known to the world, indeed, by the initial words 'I call and cry,' which, with the whole of that anthem, were adapted to the notes of 'O sacrum convivium' by Dean Aldrich. Charles Butler, of Oxford, a man of great learning, and known to the world by his attempts to reform the English orthography, commends 'Absterge Domine,' the second of the *Cantiones Sacræ* of Tallis, in the highest terms, and makes use of the authority of it for several purposes.

It is commonly said that Tallis was organist to Henry VIII. and the three succeeding princes his descendants; but it may well be doubted whether any establishment of the kind was known till the beginning of the reign of queen Elizabeth, when Tallis and Bird were severally appointed organists of the royal chapel. And here it may be necessary to mention, as has been hinted before, that the ancient foundations of conventual, cathedral, and collegiate churches in this kingdom, although less ancient than the introduction of organs into the church service,

take not the least notice of such an officer as the organist, but are endowments uniformly in favour of canons, the greater and the less, lay vicars or clerks, and choristers. Nay farther, no provision for an organist appears either in the list of the choral establishment of Edward VI. or in that of queen Mary, though in both, trumpeters and players on the sackbut occur. Hence it may fairly be presumed, and Dr. Benjamin Rogers was of that opinion, that anciently the duty of the organist, as well in cathedral and collegiate churches and chapels, as in abbies, monasteries, and other religious houses, was performed by some one or other of the vicars choral, or other members of the choir;‡ an evident proof of the flourishing state of music among us in those early times. In this view, and this only, can Tallis be considered as organist to Henry VIII. Edward VI. and queen Mary.

Notwithstanding that he was a diligent collector of musical antiquities, and a careful peruser of the works of other men, the compositions of Tallis, learned and elegant as they are, are so truly original, that he may justly be said to be the father of the cathedral style; and though a like appellation is given by the Italians to Palestrina, it is much to be questioned, considering the time when Tallis flourished, whether he could derive the least advantage from the improvements of that great man. It may therefore be conjectured that he laid the foundation of his studies in the works of the old cathedralists of this kingdom, and probably in those of the German musicians, who in his time had the pre-eminence of the Italians; and that he had an emulation to excel even these, may be presumed from the following particular. Johannes Okenheim, a native of the Low Countries, and a disciple of Iodocus Pratensis, had made a composition for no fewer than thirty-six voices, which Glareanus says was greatly admired. Tallis composed a motet in forty parts, the history of which stupendous composition, as far as it can now be traced, is as follows:—

It was originally composed, in the reign of queen Elizabeth, to the following words, 'Spem in alium nunquam habui præter in te Deus Israel, qui irascis, et propitijs eris, et omnia peccata hominum, in tribulatione dimittis, Domine Deus, creator cœli et terræ, respice humilitatem nostram.' In the reign of the first or second Charles some person put to it certain English words, which are neither verse nor prose, nor even common sense; and it was probably sung on some public occasion; but the composition with the Latin words coming to the hands of Mr. Hawkins, formerly organist of the cathedral church of Ely, he presented it to Edward earl of Oxford. Diligent search has been made for it among the Harleian manuscripts in the British

* The power of the crown to grant such privileges as are contained in this and other patents of the like kind, is expressly denied by Sir Joseph Yates, in his argument in the great case of literary property, *Millar v. Taylor*, where speaking of the patent of Tallis and Bird, and also of that granted to Morley, he says they are arbitrary, gross, and absurd. Question concerning literary property, published by Sir James Burrow, 4to. 1773, pag. 85. And it appears that Morley was questioned by the House of Commons three years after the granting it. Ames's *Typogr. Antiq.* 569.

† Thus translated in the *Biogr. Brit.*, *Art. John Bull*, page 1007, in note:—

'The Queen, the glory of our age and isle,
'With royal favor bids this science smile;
'Nor hears she only others' labor'd lays,
'But, artist-like herself both sings and plays.'

‡ In the statutes of St. Paul's cathedral, tit. DE GARTIONIBUS [i. e. of the grooms, from GARCIO, a poor servile lad, or boy-servant. COWEL.] it is said that the duty of these servants is, 'exculptur ecclesiam, compans pulsant exsufflent organa, et omne aliud humile officium exerceant in ecclesia ad imperium vergiferorum;' but though provision is thus made for blowing the organ, the statutes are silent as to who is to play it. For some years past there has been an organist of St. Paul's, with a salary, which, upon the appointment of Dr. Greene, was augmented with the revenue of a lay vicar's place.

Museum, but without effect. As to the music, it is adapted to voices of five different kinds, that is, tenor, counter-tenor, altus, or mean, and treble, eight of each; and though every musician knows that, in strictness of speech, in a musical composition there can in reality be but four parts, for where there are more, some must rest while others sing; yet this of Tallis is so contrived, that the melody of the four parts is so broken and divided as to produce the effect of as many parts as there are voices required to sing it.

It is somewhat difficult to account for the publication of the *Cantiones Sacræ* in the original Latin words at a time when it is well known that our liturgy was completely settled, and the whole of the church service was by law required to be performed in the English tongue. It is true that the first act of uniformity of Edward VI. allowed great latitude in singing, and left it in a great measure in the discretion of the clergy either to adopt the metrical psalmody of the Calvinists, or to persevere in the use of the solemn choral service; and accordingly we see them both practised at this day; but that the singing of anthems and hymns in the Latin tongue was permitted under the sanction of this licence, there is no authority for saying; and indeed, the original composition of music to the Latin service by Tallis and Bird, is not to be accounted for but upon a supposition, which there is nothing to contradict, that they were of the Romish persuasion, and that the *Cantiones Sacræ* were composed for the use of queen Mary's chapel: with respect to Tallis, it may be observed that his name occurs in a list of her establishment yet extant; and as to Bird, that besides his share in the above work, there are several masses of his composition in print, which favour the opinion that he was once of the same communion.

But notwithstanding his supposed attachment to the Romish religion, it seems that Tallis accommodated himself and his studies to those alterations in the form of public worship which succeeded the accession of Queen Elizabeth. With this view he set to music those several parts of the English liturgy, which at that time were deemed the most proper to be sung, namely, the two morning services, the one comprehending the *Venite exultemus*, *Te Deum*, and *Benedictus*; and the other, which is part of the Communion office, consisting of the *Kyrie Eleison*, *Nicene Creed*, and *Sanctus*; as also the evening service, containing the *Magnificat* and *Nunc dimittis*; all these are comprehended in that which is called Tallis's first service, as being the first of two composed by him.* He also set musical Notes to the *Preces* and *Responses*, and composed that litany, which, for its excellence, is sung on solemn occasions, in all places where the choral service is performed.

As to the *Preces* of Tallis in his first service, they are no other than those of Marbeck in his book of

Common Prayer noted: the responses are somewhat different; that is to say, in the tenor part, which is supposed to contain the melody; but Tallis has improved them by the addition of three parts, and thereby formed a judicious contrast between the supplications of the priest and the suffrages of the people, as represented by the choir.

The services of Tallis contain also chants for the *Venite exultemus* and the Creed of St. Athanasius; these are tunes that divide each verse of the psalm or hymn according to the pointing, to the end that the whole may be sung alternately by the choir, as distinguished by the two sides of the dean and the chanter. Two of these chants are published in Dr. Boyce's cathedral music, vol. I.*

* This method of singing, though it corresponds with that antiphonal singing which was introduced into the church about the year 350, by Flavianus and Diodorus, the one bishop of Antioch, the other of Tarsus, and is in truth that part of choral service which is best warranted by the practice of the primitive Christians, and the judgment of the fathers, is that which the Puritans mean when they inveigh against the practice of 'tossing the Psalms about like tennis-balls'; their sentiments are contained in that virulent libel, the first of those two Admonitions to the Parliament, the one written by Field, minister of Aldermay, London, the other by Thomas Cartwright, printed in the year 1572, wherein is the following bitter invective against the form of divine worship as then lately established: 'In all their order of service there is no edification according to the rule of the Apostle but confusion: they toss the Psalms in most places like tennis-balles. They pray that all men may be saved, and that they may be delivered from thundering and tempest, when no danger is nigh. That they sing *Benedictus*, *Nunc dimittis*, and *Magnificat*, we know not to what purpose, except some of them were ready to die, or except they would celebrate the memory of the Virgine and John Baptist, &c. Thus they prophane the holy scriptures. The people, some standing, some walking, some talking, some reading, some praying by themselves, attend not to the minister. He againe posteth it over as fast as he can galloppe; for eyther he hath two places to serve, or else there are some games to be playde in the afternoone, as *lying for the whetstone*, *heathenish dauncing* for the ring, a beare or a bull to be baited, or else *jackanapes* to ride on horse-backe, or an interlude to be plaide; and if no place else can be gotten, this enterlude must be playde in the church, &c. Now the people sit, and now they stand up. When the Old Testament is read, or the lessons, they make no reverence, but when Gospel commeth then they al stand up, for why, they thinke that to be of greatest authoritie, and are ignorant that the Scriptures came from one spirite. When Jesus is named, then of goeth the cap, and downe goeth the knees, wyth such a scraping on the ground, that they cannot heare a good while after, so that the word is hindered; but when any other names of God are mentioned, they make no curtesie at all, as though the names of God were not equal, or as though all reverence ought to be given to the syllables. We speake not of ringing when mattens is done, and other abuses incident, because we shal be answered that by the boke they are not maintayned, only we desire to have a boke to reforme it. As for organs and curious singing, though they be proper to Popysh denness, I meane to cathedrall churches; yet some others also must have them. The queenes chapell, and these churches (which should be spectacles of Chrystian reformation) are rather pattenes and presidences to the people of all superstition.'

Hooker, *Eccles. Pol.* book V. sect. 33, has defended with great learning and judgment the practice of chanting or singing the Psalms by course, or side after side, against an objection of Cartwright, in another part of his works, to wit, that 'it is the more to be suspected, as the Devil hath gone about to get it authority;' nevertheless, so lately as the time of king William, endeavours were used to get it banished from the church, for in 1689, an ecclesiastical commission issued, and we are told that in execution thereof it was proposed, among other reformations of the church-service, to lay aside chanting in cathedrals. Vide, *Calamy's Abridgment of Baxter's History of his Life and Times*, Vol. I. p. 440-453. Hooker professes to wonder, as indeed any man would, how the Devil can be benefited by our singing of Psalms; and for singing the *Benedictus* and other hymns he thus apologizes: 'Of reading or singing *Magnificat*, *Benedictus*, and *Nunc dimittis* oftener than the rest of the Psalms, the causes are no whit less reasonable; so that if the one may very well monthly, the other may as well even daily be iterated. They are songs which concern us so much more than the songs of David, as the Gospel toucheth us more than the law, the New Testament than the Old. And if the Psalms for the excellency of their use, deserve to be oftner repeated than they are, but that the multitude of them permitteth not any oftner repetition, what disorder is it, if these few Evangelical hymns, which are in no respect less worthy, and may be, by reason of their paucity, imprinted with much more ease in all men's memories, be for that cause every day rehearsed? In our own behalf it is convenient and orderly enough, that both they and we make day by day prayers and supplications the very same; Why not as fit and convenient to magnifie the name of God day by day with certain the very self-same Psalms of praise and thanksgiving: Either let them not allow the one, or else cease to reprove the other. For the ancient received use of intermingling hymns and psalms with divine readings, enough hath been written. And if any may fitly serve unto

* It may be remarked that neither the psalms, *Jubilate Deo* in the morning, nor *Cantate Domino* and *Deus miseratur* in the evening prayer, occur in the service of Tallis; the reason is, that in the first settlement of the choral service they were not included, the most ancient *Jubilate* being that of Dr. Giles, and the most ancient *Deus miseratur* that of Mr. Strogers, both printed in Barnard's Collection, hereafter mentioned. When the *Cantate Domine* was first taken it appears not.

The care of selecting from the Common Prayer the offices most proper to be sung, was a matter of some importance, especially as the Rubric contains no directions about it; for this reason it is supposed that the musical part of queen Elizabeth's liturgy was settled by Parker, archbishop of Canterbury, who, besides that he was a great divine, an excellent canon-lawyer and ritualist, and a general scholar, was also a skilful musician.* Besides the offices above-mentioned, constituting what are now termed the Morning, Communion, and Evening Services in four parts, with the preces, responses, and litany, that is to say, the versicles and suffrages, Tallis composed many anthems, as namely, 'O Lord, give 'thy holy spirit,' in four parts; 'With all our hearts,' 'Blessed be thy name,' 'Wipe away my sins,' and others in five parts, which are printed in a collection entitled 'The first Book of selected Church-music,' collected out of divers approved authors by John Barnard, one of the minor canons of the cathedral 'church of St. Paul,' 1641.

Tallis died the twenty-third day of November, 1585, and was buried in the parish church of Greenwich in Kent. Strype, in his Continuation of Stow's Survey,

published in 1720, says that in his circuit-walk round London he found in the chancel of that church, upon a stone before the rails, a brass plate thus inscribed in old letters :—

Entered here doth ly a worthy wyght,
Who for long tyme in musick bore the bell :
His name to shew, was Thomas Tallys hyght,
In honest uertuous lyff he dyd excell.
He seru'd long tyme in chappel with grete prayse,
Fower souereygnes reygnes (a thing not often scene)
I mean kyng Henry and pryncce Edward's dayes,
Queene Mary, and Elizabeth our quene.
He maryed was, though children he had none,
And lyu'd in loue ful thre and thirty yeres
Wyth loyal spowfe, whos name yclept was Jone,
Who here entomb'd, him company now bears.
As he dyd lyue, so also did he dy,
In myld and quyet fort, O happy man !
To God ful oft for mercy did he cry,
Wherefore he lyues, let deth do what he can.

The stone on which this inscription was engraven was repaired by Dean Aldrich.†

The following motet of Tallis is the second in order of the *Cantiones Sacre* published by him and Bird in 1575. The *Miserere* that here follows it, is the last composition in the same collection :—

The musical score consists of five staves, each with a different clef (Soprano, Alto, Tenor 1, Tenor 2, and Bass). The lyrics are written below the staves, with some words appearing on multiple staves. The lyrics include: "AB-STERGE Do - mi - ne, ab - ster - ge Do - mi - ne, de - lic - ta me - a . . .".

* that purpose, how should it better have been devised, than that a competent number of the old being first read, these of the new should succeed in the place where now they are set? In which place notwithstanding, there is joined with Benedictus, the hundred Psalm; with Magnificat, the ninety-eight; the sixty-seventh with Nunc Dimittis; and in every of them the choice left free for the minister to use indifferently, the one for the other. Seeing, therefore, they pretend no quarrel at other Psalms which are in like manner appointed also to be daily read, Why do these so much offend and displease their taste? They are the first gratulations wherewith our Lord and Saviour was joyfully received at his entrance into the world, by such as in their hearts, arms, and very bowels, embraced him; being prophetic discoveries of Christ already present, whose future coming the other Psalm did but fore-signify; they are against the obstinate incredulity of the Jews, the most luculent testimonies that Christian religion hath: yes, the only sacred hymns they are that Christianity hath peculiar unto itself; the other being songs too of praise and thanksgiving, but songs wherewith as we serve God, so the Jew likewise.' Eccles. Polity, bk. V. sect. 40.

† Strype, in his life of this prelate, page 4, relates that in his youth he had been taught to sing by one Love, a priest, and also by one Manthorp, clerk of St. Stephen's in Norwich; and in his translation of the Psalms of David, a book but little known, and which he composed during his retreat from the persecution of queen Mary, are certain observations on the ecclesiastical tones, which shew him to have been deeply skilled in church-music.

† There was also in the old church of Greenwich an inscription on brass in memory of Richard Bowyer, gentleman of the chapel and master of the children under king Henry VIII. Edward VI. queen Mary, and queen Elizabeth. He died 26 July, 1561, and was succeeded by Richard Edwards, from Oxford.

There was also in the same church a stone, purporting that Ralph Dallans, organ-maker, deceased while he was making the organ, which was begun by him February, 1672, and finished by James White, his partner, who completed it, and erected the stone, 1673. But the old church being pulled down soon after the year 1720, in order to the rebuilding it, not the least trace of any of these memorials is now remaining.

- a quæ in - sci-en - ter ju - ve - nis fe - - -
 - lic - ta me - a quæ in - sci - en - ter ju - ve - nis . . fe - -
 - a quæ in - sci - en - ter ju - ve - nis, ju - ve - nis fe - - -
 - a quæ in - sci - en - ter ju - ve - nis fe - - -
 de - lic - ta me - a . . . quæ in - sci - en - ter ju - ve - nis fe - - -

- ci et ig - nos - ce pæ - ni - ten - ti, nam tu es De - us
 - ci et ig - nos - ce pæ - ni - ten - ti, nam tu . . .
 - ci et ig - nos - ce pæ - ni - ten - ti, nam tu es De - us me -
 - ci et ig - nos - ce pæ - ni - ten - ti, nam tu . . .
 - ci et ig - nos - ce pæ - ni - ten - ti.

me - us, nam tu es . . . De - us me - - -
 . . . es De - us me - us, nam tu . . . es De - us me -
 - us, nam tu es De - us me - us, De - us me -
 . . . es nam tu es De - us me - us,
 nam tu - es De - us me - us, De - us me -

- us, ti - bi so - li fi - dit
 - us, ti - bi so - li fi - dit a - ni - ma me - a, ti - bi so - li fi - dit a - ni -
 - us, ti - bi so - li fi - dit a - ni - ma me - - -
 . . . ti - bi so - li fi - dit, ti - bi so - li fi - dit a - ni - ma me -
 - us, ti - bi so - li fi - dit a - ni - ma me - a,

a - ni - ma me - - a, a - ni - ma me - a, tu
 - - ma me - - - - a, tu es sa - lus me -
 - - a a - ni - ma me - a, a - ni - ma me - - - a,
 - a, ti - bi so - li fi - dit a - ni - ma me - a, tu es sa - lus me - - - a,
 ti - bi so - li fi - dit a - ni - ma me - a, tu es sa - lus me - - - -
 es sa - lus me - - - - a, tu es sa - lus me - -
 - - a, tu es sa - lus me - - - a, tu es sa - lus me - a, tu es sa -
 tu es sa - lus me - - - - a, tu es sa -
 tu es sa - lus me - a, tu es sa - lus me - - a, tu es sa -
 - - - a, tu es sa - lus me - - - - a, tu es sa -
 - - - a, do - lo - - rem me - - - um, te - stan -
 - lus me - - a, do - lo - rem me - - - um, te - stan - tur
 - lus me - - a, do - lo - rem me - - - um, te - stan - - tur la -
 - lus me - - a, do - lo - rem me - - - um, te - stan - tur la - chri -
 - - lus me - - a, do - lo - rem me - - - um, te -
 - tur la - chri - mæ me - - æ, do - lo - - rem me - - - um,
 la - chri - mæ me - - - æ, do - lo - rem me - - - um,
 - - chri - mæ me - - - æ, do - lo - rem me - - - um, te - stan -
 - mæ me - - - æ, do - lo - rem me - - - um, te -
 - stan - tur la - chri - mæ me - - æ, do - lo - - rem me - - -

The image displays a musical score for a hymn, featuring ten staves of music. The melody is written in G major (one sharp) and 4/8 time. The lyrics are printed below each staff, corresponding to the notes. The text is in Latin and English, with some words in Old English script (e.g., æ). The hymn begins with "te - stan - tur la - chri-mæ me - æ," followed by "sis memor Do - mi - ne, sis memor". It continues with "Do - mi - ne, sis memor Do - mi - ne, . . . bo - næ vo-lun-", "sis memor Do - mi - ne, sis memor Do - mi - ne, bo - næ vo-lun - ta - tis tu -", "mi - ne, sis memor Do - mi - ne, . . . bo - næ", "sis memor Do - mi - ne, sis memor Do - mi - ne, . . . bo - næ vo-lun-ta-tis", "ta - tis tu - æ, bo - næ vo-lun - ta - tis tu -", "æ, bo - næ vo-lun-ta-tis tu -", "vo-lun-ta-tis tu - æ, bo - næ vo-lun - ta - tis tu -", "æ, bo - næ vo - lun - ta-tis tu - æ, tu -", "tu - æ, bo - næ vo - lun - ta-tis, bo - næ vo-lun - ta - tis tu -", "æ, Nunc ex - au - di pre - ces me - as,", "æ, Nunc ex - au - di pre-ces me -", "æ, Nunc ex - au - di pre - ces me - as,", "æ, Nunc ex - au - di pre - ces me - as, Nunc ex-au - di pre -", "æ Nunc ex - au - di pre - ces me - as Nunc ex -au - di pre -".

te - stan - tur la - chri-mæ me - æ, sis memor Do - mi - ne, sis memor

te - stan - tur la - chrimæ me - æ, sis memor Do - mi - ne,

- - - tur la - chrimæ me - æ, sis memor Do -

- stan-tur la-chri-mæ . . . me - æ, sis memor Do - mi - ne, sis memor Do - mi - ne,

- - - um te - stan - tur la - chrimæ me - æ, sis memor Do - mi - ne,

Do - mi - ne, sis memor Do - mi - ne, . . . bo - næ vo-lun

sis memor Do - mi - ne, sis memor Do - mi - ne, bo - næ vo-lun - ta - tis tu -

- mi - ne, sis memor Do - mi - ne, . . . bo - næ

sis memor Do - mi - ne, bo - næ vo - lun - ta - tis tu -

sis memor Do - mi - ne, sis memor Do - mi - ne, . . . bo - næ vo-lun-ta-tis

- ta - tis tu - æ, bo - næ vo-lun - ta - tis tu -

- æ, bo - næ vo-lun-ta-tis tu -

vo-lun-ta-tis tu - æ, bo - næ vo-lun - ta - tis tu -

- æ, bo - næ vo - lun - ta-tis tu - æ, tu -

tu - æ, bo - næ vo - lun - ta-tis, bo - næ vo-lun - ta - tis tu -

- æ, Nunc ex - au - di pre - ces me - as,

- æ, Nunc ex - au - di pre-ces me -

- æ, Nunc ex - au - di pre - ces me - as,

- æ, Nunc ex - au - di pre - ces me - as, Nunc ex-au - di pre -

- æ Nunc ex - au - di pre - ces me - as Nunc ex -au - di pre -

Nunc ex - au - di pre - ces me - as, et
 - as, Nunc ex - au - di pre - ces me - as, et ser - vi-et per æ -
 Nunc ex - au - di pre - ces me - as, pre-ces me - as, et ser - vi-
 - ces, Nunc ex - au - di pre - ces, pre-ces me - as, et ser - vi-et per
 - ces me - as, pre-ces me - as,

ser - vi-et per æ - vum, et ser - vi-et per æ - vum, .
 - vum, et ser - vi-et per æ - vum, per æ -
 et per æ - vum, et ser - vi-et per æ -
 æ - vum, per æ - vum, et ser - vi-et per æ - vum, per æ - vum,
 et ser - vi-et per æ - vum, et ser - vi-et per æ -

ti-bi spi - ritus, ti-bi spi - ritus me - us, . ti-bi
 - vum, ti-bi spi - ritus me - us,
 - vum, ti-bi spi - ritus me - us, ti-bi spi - ritus me - us,
 ti-bi spi - ritus me - us, ti-bi spi - ritus me - us, ti-bi spi - ritus me -
 - vum, ti-bi spi - ritus me - us, . ti-bi spi - ritus me -

spi - ritus me - us, et ser - vi-et, et ser - vi-et per
 ti-bi spi - ritus me - us, et ser - vi-et per æ -
 ti-bi spi - ritus . me - us, et ser - vi-et per æ - vum,
 - us, me - us, et ser - vi-et per æ - vum, ti-bi spi - ri -
 - us, ti-bi spi - ritus me - us, et ser - vi-et per æ - vum, .

. . . æ - vum, ti-bi spi - ritus me - - us, A - - men. . . .
 - - vum, ti-bi spi - ritus me - - us, A - - men. . . .
 ti-bispi - ri - tus me - us, ti-bispi - ritus . . me - - us, A - men. . . .
 - tus me - us, ti-bi spi - ritus me - - us, me - - us, A - men. . . .
 . . . ti-bi spi - ri - tus me - us, ti-bi spi - ritus me - us, A - men.

THOMAS TALLIS.

CANON.

MI - SE - RE . . . RE nos - - tri Do - -
 MI - SE - RE . . . RE nos - - tri .
 MI - SE - RE - RE nos - tri Do . . . mine, mi - se - re - re . . . nos .
 MI . . . SE . . . RE . . .
 MI - SE - RE - RE nos - tri, mi . . .
 MI . . .
 MI - SE - RE - RE nos - tri Do . . .
 . . . mi - ne, . . . mi - se - re . . . re
 Do . . . mi - ne, . . . mi - se - re . . .
 . . . tri, mi - se - re . . . re nos - tri, mi -
 RE . . . nos - tri Do . . .
 . . . se - re . . . re . . . nos - tri Do . . .
 SE . . . RE . . .
 . . . mi - ne, mi - se - re - re . . . nos .

nos - - - tri, mi - se - re - - - re
 ro nos - - - tri, mi - se - re - - - re
 se - re - re . . . nos - tri Do - - - mi -
 mi - ne, mi - se - re - - - re nos - - - tri, mi - se -
 RE nos
 tri, mi - se - re - - - re
 nos - - - tri, mi - se - re - - - re
 ne, mi - se - re - - - re nos - - - tri, nos - -
 re - re nos
 re re, . . . mi - se - re - re nos
 tri Do
 re nos - - - tri, mi - se - re - - - re
 nos tri, nos tri.
 nos tri, nos tri.
 tri, nos tri.
 tri, nos tri, nos tri.
 re nos tri Do mi ne.

THOMAS TALLIS.

The Miserere above exhibited is in its contexture extremely curious and artificial, as will appear by the following analysis of its parts :—

- | | |
|---------------------|---|
| 1 Superius primus - | { Duse Partes in una, Canon in unisono. |
| 2 Superius Secundus | { Canon in unisono. |
| 3 Discantus - - - | { Quatuor partes in una, Canon in unisono, crescit in duplo, Arsin et Thesin. |
| 4 Contratenor - - | { Canon in unisono. |
| 5 Tenor - - - | { Voluntaria pars. |
| 6 Bassus primus - | { Canon in unisono. |
| 7 Bassus secundus - | { Canon in unisono. |

RICHARD FARRANT, a fine old composer for the church, was a gentleman of the chapel royal in 1564, and after that master of the children of St. George's chapel at Windsor, with an allowance of 81*l.* 6*s.* 8*d.* per annum for their diet and teaching. He was also one of the clerks and one of the organists of the same chapel. Upon occasion of these latter appointments he resigned his place in the chapel royal, but in 1569 was called to it again, and held it till 1580, when Anthony Todd was appointed in his room. His places in the chapel at Windsor he enjoyed to the time of his death, which is supposed to have been in 1586, Nathaniel Giles, then a bachelor in music, being sworn into both of them on the first day of October in that year. His compositions are in a style remarkably devout and solemn; many of them are printed in Barnard's Collection of Church-music above-mentioned, and a few in Dr. Boyce's cathedral music.

ROBERT PARSONS, OR, as his name is spelt by Morley, PERSONS, was organist of Westminster abbey. The following epitaph on him is in Camden's Remains.

Upon Master Parsons, Organist at Westminster.

Death passing by and hearing Parsons play,
Stood much amazed at his depth of skill,
And said 'This artist must with me away,'
For death hereaves us of the better still;
But let the quire, while he keeps time, sing on,
For Parsons rests, his service being done.

He was sworn of queen Elizabeth's chapel on the seventeenth day of October, 1563, and was drowned at Newark-upon-Trent on the twenty-fifth of January, 1569. Many of his compositions are extant in MS.

Butler, in his Principles of Music, page 91, speaks in terms of high commendation of the "In Nomines" of Parsons, and those also of Tye and Taverner.*

* The term In Nomine is a very obscure designation of a musical composition, for it may signify a fugue, in which the principal and the reply differ in the order of solmisation; such a fugue being called by musicians a Fugue in Nomine, as not being a fugue in strictness. Again, it may seem to mean some office in divine service, for in the Gradual of the Romish church the Introitus, In festos sanctissimi nominis Jesu, has this beginning, 'In nomine Jesu omne genu flectatur;' and this latter circumstance seems to be decisive of the question. But upon looking into an In Nomine of Master Taverner, in that venerable old book entitled 'Morning and Evening Praier and Communion set forth in fower partes, to be song in churches,' printed by John Day in 1565, it clearly appears that the term refers to the nineteenth Psalm, as it stands in the Vulgate, though it is the twentieth in our translation, and that by reason of the following verse in it, 'Lætabimur in salutari tuo: et in nomine Dei nostri magnificabimur.'

In the Life of Milton by his nephew Phillips, prefixed to the English translation of his State Letters, it is said that John Milton the father, who was so eminently skilled in music as to be ranked among the masters of the science in his time, composed an In Nomine, for which he received of a Polish prince a present of a gold chain and medal.

Parsons left behind him a son named John, who became master of the choristers in Westminster Abbey. In the year 1616, upon the recommendation of Dr. Mountain, the Dean, he was elected one of the parish clerks, and also organist of the Parish church of St. Margaret's, Westminster. See a subsequent part of this work.

CHAP. XCVI.

In what manner the theory of music was anciently taught in the universities of this kingdom, especially that of Oxford, may in some measure be collected from the accounts given by Wood of the studies and exercises of candidates for degrees in that faculty. As to the practice of it, it is evident that for many years it was only to be acquired in monasteries, and in the schools of cathedral and collegiate churches. The music lecture in Oxford was not founded till the year 1626; and before that time, although there were endowments for the support of professors, and the reading of lectures in divinity and other faculties, we meet with no account of any thing of the kind respecting music.

It is probable that this consideration, and a view to the benefit that might accrue to students in music, in common with those intended for other professions, from public lectures, were the motives of that princely-spirited man, Sir Thomas Gresham, to the foundation of that college in London known by his name, which within these few years has ceased to exist; and the endowment for the maintenance of persons of sufficient ability to read public lectures in the faculties and sciences of divinity, astronomy, music, geometry, law, physic, and rhetoric.

To this end he by his will, bearing date the fifth of July, 1575, declares the uses of a conveyance made by him dated the twentieth day of May preceding, to his lady and certain other trustees therein named, that is to say: 'As to a moiety of his buildings in London called the Roiall Exchange, after the determination of the particular estates in the whole by the said conveyance limited, to the maior and cominalty and cittezens of London and their successors, willing and disposing that they shall every year give and distribute to and for the sustentation, maynetaunce, and findinge foure persons, from tyme to tyme to be chosen, nominated, and appointed by the said maior and cominalty and cittezens, and their successors, mete to rede the lectures of divynitye, astronomy, musicke, and geometry, within his then dwelling-house in the parish of St. Hellynes in Bishopsgate-streete, and St. Peeters the Pore, in the cittye of London, the somme of two hundred pounds of lawfull money of England, that is to say, to every of the said readers for the tyme beinge, the somme of fifty pounds yerely, for their salaries and stipendes mete for four sufficiently learned to reade the said lectures, the same to be paid at two usual tearmes in the yere yerely, that is to say, at the feastes of th' annunciation of St. Mary the virgin, and of St. Mighell th' archangell, by even portions to be paid.'

And as concerning the other moiety which he had by his said will disposed to the wardens and comi-

nalty of the mistery of the mercers of the cittye of London, the testator wills and disposes it to them and their successors that they shall 'yerely pay and 'distribute to and for the finding, sustentation, and 'mayntenance, of three persons mete to read the 'lectures of law, phisicke, and rethoricke, within his 'dwelling-house aforesaid, 150*l.*, viz. 50*l.* to each of 'the said three persons.'

These endowments, by the terms of the will, were postponed during the life of lady Gresham. Sir Thomas died on the twenty-first day of November, 1579, and his lady on the third of November, 1596; upon which the provisions for the lectures took effect. In the beginning of the year succeeding the death of lady Gresham, the mayor, &c. of London, and the Mercers' Company, wrote to the universities of Oxford and Cambridge, requesting a nomination to them severally of persons properly qualified for professors, in consequence of which nomination three were chosen from each university; the seventh, that is to say, the music professor, Dr. John Bull, was appointed by the special recommendation of queen Elizabeth.

Having elected the professors, the city and the Mercers' Company next proceeded to settle the course and subjects of the lectures; and this was done by certain ordinances and agreements, bearing date the sixteenth day of January, 1597, between the mayor and commonalty and citizens of London on the first part, the wardens and commonalty of the mystery of Mercers of the same city of the second part, and the lecturers elected and appointed and placed in Gresham house on the third part.

It was for some time a matter of debate whether the lectures should be read in English or in Latin, or in both languages;* the reasons for reading them, or at least the divinity lecture, in English, are extant in Strype's edition of Stowe's Survey, but at length it was agreed that they should be read in both languages.

The ordinances above-mentioned may be seen at large in Strype's edition of Stowe, vol. II. Append. II. page 2, and also in the preface to Ward's Lives of the Gresham Professors: what concerns the music lecture is in these words:—

'The solemn musick lecture is to be read twice 'every week, in manner following, viz., the theorique 'part for half an hour, or thereabouts; and the prac- 'tique by concent of voice or of instruments, for the 'rest of the hour; whereof the first lecture to be in 'the Latin tongue, and the second in the English 'tongue. The days appointed for the solemn lectures 'of musick are Thursday and Saturday in the after- 'noons, between the hours of three and four; and 'because at this time Mr. Doctor Bull is recom- 'mended to the place by the queen's most excellent 'majesty, being not able to speak Latin, his lectures 'are permitted to be altogether in English so long as 'he shall continue the place of the music lecturer 'there.'

The ordinances above-mentioned appoint the days and hours for reading the several lectures; but these were not finally adjusted till the year 1631, when

the reading was confined to the law terms, and that in the following order:—

Monday,	Divinity.
Tuesday,	Civil Law.
Wednesday,	Astronomy.
Thursday,	Geometry.
Friday,	Rhetoric.
Saturday,	{ Physic.
	{ Music.

And this is the order now observed.†

WILLIAM BIRD, supposed to be the son of Thomas Bird, one of the gentlemen of the chapel in the reign of Edward VI.‡ was one of the children of the same; and, as it is asserted by Wood in the Ashmolean MS. was bred up under Tallis. There are some particulars relating to this eminent person that embarrass his history, and render it difficult to ascertain precisely either the time of his birth, or his age when he died, and consequently the period in which he flourished. That he was very young in the reign of Edward VI. may be concluded from the circumstance that he lived till the year 1623, at which time, supposing him to have been born in the first year of that prince's reign, viz. anno 1546, he must have been of the age of seventy-seven. And yet there are many of his compositions, particularly masses, extant, which must be supposed to have been made while the church service was in Latin, and bespeak him to have arrived at great excellence in his faculty before the final establishment of the liturgy under queen Elizabeth. The most probable conjecture that can be formed touching this particular seems to be, that he was a child of the chapel under Edward VI. and as his name does not occur in the chapel establishment of queen Mary, that he was either not in her service, or if he was, that he did not receive a stipend as Tallis and others did whose names are entered on the roll.

There can be very little doubt, considering the time when they lived, and the compositions by them published separately and in conjunction, but that both Tallis and Bird were of the Romish communion. It was not to be expected that in those times the servants of the chapel should be either divines or casuists, therefore it is not to be wondered at if Tallis in particular accommodated himself to those successive changes of the national religion which were made before the reformation was completed; or that he and Bird should afterwards fall in

† In the eighth year of the present king an act of parliament passed for carrying into execution an agreement of the city and the mercers' company with the commissioners of the excise revenue for the purchase of Gresham-college, and the ground and buildings thereunto belonging, and for vesting the same in the crown for the purpose of erecting and building an excise-office there, and for enabling the lecturers of the said college to marry, notwithstanding any restriction contained in the will of Sir Thomas Gresham, knight, deceased.

The bill was strongly opposed in the house of commons by the professors, with Dr. Pemberton, the physic professor, at their head; but a clause being inserted therein that gave him an additional sum of 50*l.* a year for his life, he was satisfied, as were the other professors with the sum of 50*l.* a year in lieu of their apartments in the college over and above their stipends, and that provision in the act that left them at liberty to marry. The city, and also the mercer's company were obliged to find and provide a proper and sufficient place or places for the professors to read in; and accordingly the lectures are now read in a room over the Royal Exchange.

‡ Besides being a gentleman of the chapel, it seems that he was clerk of the cheque. He died in 1561.

with that establishment which banished superstition and error from the church, and become good and sincere protestants.

Upon the accession of queen Elizabeth, and the resolutions taken by her to reform the choral service, Richard Bowyer, who had been master of the children under king Henry VIII. Edward VI. and queen Mary, was continued in that station; Dr. Tye, who seems to have been out of employ during the reign of queen Mary, and William Blitheman, were made organists, and Tallis continued a gentleman of the chapel royal. As to Bird, there seems to have been no provision made for him at court: on the contrary, he went to Lincoln, of which cathedral he had been chosen organist in 1563; nor does it appear that he had any employment in the chapel till the year 1569, when he was appointed a gentleman thereof in the room of Robert Parsons, who about a month before, by accident, was drowned at Newark-upon-Trent.* Upon his being elected into the chapel, Bird was permitted by the dean and chapter to execute his office of organist of Lincoln by a substitute named Butler, of whom there are no memorials remaining.

It appears that in 1575, Tallis and Bird were both gentlemen, and also organists of the royal chapel; but the time of their appointment to this latter office cannot now be ascertained.

Wood, in his account of Morley, *Fasti*, anno 1588, says of Bird that he was skilled in the mathematics; and it there and elsewhere appears that Morley, who was his disciple, was taught by him as well mathematics as music.

These are all the particulars of his life that can now be recovered, excepting that he died on the fourth day of July in the year 1623, and that he had a son named Thomas, educated in his own profession, who in the year 1601 was the substitute of Dr. John Bull, and while he was travelling abroad for the recovery of his health, read the music lecture for him at Gresham college.

The compositions of Bird are many and various; those of his younger years were mostly for the service of the church, and favour strongly the supposition that he then adhered to the Romish communion; for with what reason can it be imagined that a protestant musician should, not to mention other Latin offices, compose masses? and of these there are three at least of Bird's actually in print, one for three, another for four, and another for five voices.

The work herein before spoken of, entitled '*Cantiones, quæ ab argumento sacræ vocantur, quinque et sex partium, Autoribus Thoma Tallio et Guilielmo Birdo*,' London 1575, oblong quarto, was composed by Bird, in conjunction with Tallis, and seems to be the earliest of his publications, though he must at that time have been somewhat advanced in years. He also composed a work of the same kind entitled '*Sacrarum Cantionum, quinque vocum*,' printed in 1589, among which is that noble composition '*Civitas sancti tui*,' which for many years past has

been sung in the church as an anthem to the words 'Bow thine ear, O Lord.'

Besides these he was the author of a work entitled '*Gradualia, ac Cantiones sacræ, quinis, quaternis, trinisque vocibus concinnatæ. lib. primus. Authore Guilielmo Byrde, Organista regio Anglo*.' Of this there are two editions, the latter published in 1610.

In the dedication of this work to Henry Howard, earl of Northampton, the author testifies his gratitude to that nobleman for the part he had taken in procuring for him and his fellows in the royal chapel an increase of salary. His words are these: '*Te suatore ac rogatore, serenissimus rex (exemplo post regis Edouardi tertii ætatem inaudito) me sociosq; meos, qui ipsius majestati in musicis deservimus, novis auxit beneficiis, et stipendiorum incrementis.*'

The contents of this first book of the *Gradualia* are antiphons, hymns, and other offices, in the Latin tongue for the festivals, that is to say, In festo Purificationis, In festo omnium sanctorum, In festo corporis Christi, In festo nativitatis beatæ Mariæ Virginis, and others, probably composed during the reign of queen Mary.

Another collection of the like sort, and by the same author, was published by him in the same year 1610, with this title, '*Gradualia, seu cantionum sacrarum: quarum aliæ ad quatuor, aliæ vero ad quinque et sex voces editæ sunt.*'

These, with the masses above-mentioned, after a careful enquiry, seem to be the whole of the compositions for the church, published by Bird himself; and, that he should think it proper to utter them in the reign of James the First, and at a time when the church had rejected these and numberless other offices of the like kind, which formerly made a part of divine service, can only be accounted for by that disposition which then prevailed in the public to receive and admire whatever had the sanction of his name.

Although it appears by these his works that Bird was in the strictest sense a church musician, he occasionally gave to the world compositions of a secular kind; and he seems to be the first among English musicians that ever made an essay in the composition of that elegant species of vocal harmony the madrigal. The *La Verginella* of Ariosto, which he set in that form for five voices, being the most ancient musical composition of the kind to be met with in the works of English authors.

To speak of his compositions for private entertainment, there are extant these that follow:—

'Songs of sundry natures, some of gravitie, and others of myrth, fit for all companies and voyces,' printed in 1589.

'Psalmes, sonets, and songs of sadness and pietie made into musicke of five parts, whereof some of

* This disaster befel Parsons January 25, 1569, and Bird was sworn in his room February 22, in the same year. Cheque Book.

† This passage has an allusion to a grant of James I. anno 1604, after a long and chargeable suit, with the furtherance of the earl of Northampton, and other honourable persons, whereby the stipends of the gentlemen of the chapel were increased from thirty to forty pounds per annum, and the allowance for the twelve children from sixpence to tenpence per diem, with a proportionable increase of salary to the serjeant, the two yeomen, and the groom of the vestry. A memorial of this grant is entered in the cheque-book of the chapel-royal, with an anathema upon whosoever shall take out the leaf. A copy of the whole verbatim is inserted in a subsequent page of this work.

'them going abroad among divers in untrue coppies, 'are here truly corrected; and th' other being songs 'very rare and newly composed, are here published 'for the recreation of all such as delight in musicke, 'by William Byrd, one of the Gent. of the Queens 'Majesties royall chappell.'

The last of his works published by himself is entitled 'Psalmes, Songs, and Sonets: some solemne, 'others joyfull, framed to the life of the words, fit 'for voyces or viols of 3, 4, 5, and 6 parts.' Lond. 1611.

Besides these he was the author of many compositions published in collections made by other persons, namely, that entitled 'Parthenia, or the maiden-head of the first musick that ever was 'printed for the virginals, composed by three 'famous masters, William Byrd, Dr. John Bull, and 'Orlando Gibbons, gentlemen of her majesties chappell,' in which are three lessons for that instrument of his composition. In the printed collections of services and anthems published at sundry times, namely, those of Day and Barnard, are many composed by him, and still many more which exist only in the manuscript books of the king's chapel, the cathedral, and collegiate churches of this kingdom.

That he was an admirable organist there cannot be the least doubt: a very good judge of music, who was well acquainted with him, says that 'with fingers 'and with pen he had not his peer;*' and we need but advert to his compositions to judge of his style and manner of playing on that noble instrument. If he had, as the passage above-cited seems to indicate, a free and voluble hand, we may reasonably conclude that the exercise of it was sufficiently restrained and corrected by his judgment; and that his voluntaries were enriched with varied motion, lofty fugues, artful syncopations, original and unexpected cadences, and, in short, all the ornaments of figurate descent, forming a style solemn, majestic, and devout.

His music for the virginals, or, as we should now say, his lessons for the harpsichord, are of a cast proper for the instrument; and as we cannot but suppose that he was able to play them himself, bespeak in him a command of hand beyond what will readily be conceived of by those who imagine, as is the truth in many instances, that the powers of execution, as well in instrumental as vocal music, have been increasing for two centuries past even to this day. In the collection entitled *Parthenia* above-mentioned, the lessons of Bird are none of the easiest; but in a manuscript collection, consisting solely of his own compositions, and presented by him to a scholar of his, the lady Nevil, are some as difficult to execute as any of modern times. In this collection is that composition taken notice of by Dr. Ward in his Life of Dr. Bull, entitled 'Have with you to 'Walsingham.'†

* See the verses of John Baldwin in a subsequent page.

† This lesson is mentioned by Dr. Ward, as being in a manuscript volume in the library of Dr. Pepusch, the contents whereof he has given at large; in that collection it stands the first, and is called only *Walsingham*. The Doctor in a note styles it 'As I went to Walsingham,' and says, without vouching any authority, that this tune was first composed by Bird with twenty-two variations, and that afterwards thirty others were added to it at different times by Dr. Bull.

Dr. Ward in this note seems to confound the lesson with the tune; for

But, notwithstanding the number and variety of Bird's compositions, the most permanent memorials of his excellencies are his motets and anthems, to which may be added a fine service in the key of D with the minor third, the first composition in Dr. Boyce's *Cathedral Music*, vol. III. and that well-known canon of his 'Non nobis Domine,' concerning which in this place it is necessary to be somewhat particular.

There seems to be a dispute between us and the Italians whether the canon 'Non nobis Domine' be of the composition of our countryman Bird or of Palestrina. That it has long been deposited in the Vatican library, and there preserved with great care, has been confidently asserted, and is generally believed; and that the opinion of the Italian musicians is that it was composed by Palestrina may be collected from this, that it has lately been wrought into a concerto in eight parts, and published at Amsterdam in the name of Carlo Ricciotti, with a note that the subject of the fugue of the concerto is a canon of Palestrina; and that subject is evidently the canon above-mentioned in all its three parts.

Now though it is admitted that the canon 'Non 'nobis Domine' does not occur among any of the works of Bird above enumerated, and that its first publication was by John Hilton, at the end of his collection of Catches, Rounds, and Canons, printed in 1652; yet there seems to be evidence more than equipollent to what has yet been produced on the other side of the question, that he and he only was the author of it: in such a case as this, tradition

it is more than probable that it was composed upon the ground of a tune to an old interlude or ballad in Pepy's collection mentioned by Dr. Percy in his *Reliques of ancient English Poetry*, vol. II. pag. 91, and beginning thus:—

'As I went to Walsingham,
'To the shrine with speede,
'Met I with a jolly palmer
'In a pilgrime's weede.
"Now God you save you jolly palmer!
"Welcome lady gay,
"Oft have I sued to thee for love,
"Oft have I said you nay."

To confirm this opinion of the Doctor's mistake, it may be observed that many of Bird's lessons were composed on old grounds or popular tunes: to give an instance of one in particular, in Lady Nevil's book above-mentioned is a lesson of Bird, entitled *Sellenger's*, i. e. *St. Leger's Round*; this *Sellenger's Round* was an old country dance, and was not quite out of knowledge at the beginning of the present century, there being persons now living who remember it. Morley mentions it in his *Introduction*, pag. 118, and Taylor the water-poet, in his tract entitled 'The world runs on wheels.' And it is printed in a collection of country-dances published by John Playford in 1679, the notes of it are as follow:—



Bird's lesson called *Sellenger's Round* above mentioned, is apparently a set of variations on the country-dance of the same name; and it is highly probable that the lesson 'As I went to Walsingham,' was also a set of variations on the tune of some old ballad which had these for its initial words.

must be deemed of some weight, it is hard to conceive that a falsehood of this kind could ever gain credit, and still harder that it should maintain its ground for nearly two centuries. Dr. Pepusch in his *Treatise of Harmony* has expressly ascribed it to Bird, and if he and the rest of the world concurred in believing it to be a composition of his, we at this day, without any substantial evidence to the contrary, can hardly be justified in doubting whether he or another was the author of it.

From the nature of his works it is easy to discover that Bird was a man of a grave and serious temper, the far greater part of them being for the church; and as to the rest, they are in general as he terms them, 'Psalmes and songs of sadnes and pietie.' Nevertheless he could upon occasion exercise his fancy on lighter subjects, but never in the composition to words of an indecent or profane import. Twice in his life it seems he made an essay of his talent for light music in the composition of the madrigals, 'La Verginella è simile un rosa' and 'This sweet and merry month of May:':* of the former of which Peacham says it is not to be mended by the best Italian of them all.

There is extant of Bird one, and one wly essay in that kind of composition which tends to promote mirth and good fellowship by drinking and singing, namely, the Round or Catch. It is printed in Hilton's collection; the words are 'Come drink with me,' &c.

Morley relates that Bird and master Alfonso, [the elder Ferabosco] in a virtuous contention, as he terms it, in love betwixt themselves, made upon the plain-song of a Miserere each to the number of forty ways, and that they could have made infinite more at their pleasure. From which it is to be inferred that he was a man of an amiable disposition, and that between him and his competitor [Ferabosco] there was none of that envy which sometimes subsists between the professors of the same art, and which, as Morley insinuates, is chargeable on the times when they both lived.

The testimonies to the merits of this most excellent musician are almost as numerous as the authors, at least of this country, who have written on the science or practice of music since his time. In the cheque-book of the chapel-royal he is called the father of music; and in the commendatory verses before the second part of the Gradualia, 'Britannico musicæ parenti.' Morley styles him 'his loving master never without reverence to be named of musicians;' and Peacham asserts, that even by the judgment of France and Italy he was not excelled by the musicians of either of those countries. Speaking of his *Cantiones sacræ* and Gradualia, he says, what all must allow who shall peruse them, that they are angelical and divine; and of the madrigal *La Ver-*

ginella, and some other compositions in the same set, that they cannot be mended by the best Italian of them all.

Besides his salaries and other emoluments of his profession, it is to be supposed that Bird derived some advantages from the patent granted by queen Elizabeth to Tallis and him, for the sole printing of music and music-paper: Dr. Ward speaks of a book which he had seen with the letters T. E. for Thomas East, Est, or Este, for he spelt his name in all of these three ways, who printed music under that patent.

Tallis died in 1585, and the patent, by the terms of it, survived to Bird, who no doubt for a valuable consideration, permitted East to exercise the right of printing under the protection of it: and he in the title-page of most of his publications styles himself the assignee of William Byrd. This patent granted for twenty-one years expired in 1595; and afterwards another, containing a power to seize music books and music paper, was granted to Morley.

The music printed under this patent was in general given to the world in a very elegant form, for the initial letters of the several songs were finely ornamented with fanciful devices; every page had an ornamented border, and the notes, the heads whereof were in the form of a lozenge, were well cut, and to a remarkable degree legible.

Wood seems to have erred in ascribing to Bird an admired composition in forty parts, which he says is not extant. Compositions in forty parts are not very common; there is one of Tallis, of which an account has been given in a preceding page, and is probably the composition alluded to by Wood, who seems to have been guilty of a very excusable mistake of one eminent musician for another.

In a manuscript collection of motetts, madrigals, fantasias, and other musical compositions of sundry authors, in the hand-writing of one John Baldwine, a singing-man of Windsor, and a composer himself, made in the year 1591, are many of the motetts of Bird in score. The book is a singular curiosity, as well on account of its contents, as of certain verses at the end composed by Baldwine himself, in which the authors whose works he had been at the pains of collecting are severely characterised. The verses are very homely, but the eulogium on Bird is so laboured and bespeaks so loudly the estimation in which he was held, as well abroad as at home, that the insertion of the whole will hardly be thought to need an apology:—

Reede, here, behold and see all that muficians bee:
What is inclosde herein, declare I will beginne.

A store-houffe of treasure this booke may be saide
Of fonges most excelenste and the beste that is made,
Collected and chofen out of the best autours
Both stranger and English borne, whiche be the best makers
And skilfullt in musicke, the fcyence to sett foorth
As herein you shall finde if you will speake the truthe.
There is here no badd fonge, but the best can be hadd,
The cheefest from all men: yea there is not one badd,
And such sweet musicke as dothe much delite yeelede
Bothe unto men at home and birds abroade in field.
The autors for to name I maye not here forgett,
But will them now downe put and all in order sett.

* Taken from the *Orlando Furioso*, canto primo. The first of these madrigals is in five parts, and is printed at the end of the 'Psalmes, sonets, and songs of sadnes and pietie;': a translation of the words fitted to the same notes, may be seen in a collection entitled 'Musica Transalpina;': the other madrigal is printed in a collection entitled 'The first sett of Italian madrigals Englished by Thomas Watson,' it is set both in five and six parts. In the title-page of the latter book the two latter madrigals are said to be composed after 'the Italian vaine at the request of the sayd Thomas Watson.'

I will begin with White, Shepper, Tye, and Tallis,
 Parfons, Gyles, Mundie th'ould one of the queenes pallis,
 Mundie yonge, th'ould man's sonne and like wyfe others moe;
 There names would be to longe, therefore I let them goe;
 Yet must I speake of moe euen of strangers also:
 And firste I must bringe in Alfonso Ferabosco,
 A stranger borne he was in Italie as I here;
 Italians saie of him in skill he had no peere.
 Luca Merensio with others manie moe,
 As Philipp Demonte the emperor's man also;
 And Orlando by name and ecke Crequillion,
 Cipriano Rore: and also Andreon.
 All famous in there arte, there is of that no doute:
 There workes no lesse declare in euerie place aboute,
 Yet let not strangers bragg, nor they these foe commende;
 For they maye now geve place and sett themselves behynd
 An Englishe man, by name, Willm Birde for his skill
 Which I should haue sett first, for soe it was my will;
 Whose greates skill and knowledge dothe excelle all at this tyme
 And far to strange countries abroad his skill dothe shynae:
 Famous men be abroad, and skilful in the arte,
 I do confesse the fame and will not from it starte;
 But in Ewropp is none like to our Englishe man,
 Which doth so farre exceede, as trulie I it scan,
 As ye cannot finde out his equale in all thinges
 Throwge out the worlde so wide, and so his fame now ringes.
 With fingers and with penne he hathe not now his peere;
 For in this world so wide is none can him come neere.
 The rarest man he is in musicks worthy arte
 That now on earth doth liue: I speake it from my harte
 Or heere to fore hath been or after him shall come:
 None such I feare shall rise that may be calde his sonne.

O famous man! of skill and judgemente greates profounde;
 Lett heauen and earth ringe out thy worthye praise to fownde;
 Ney lett thy skill it selfe thy worthie fame recorde
 To all posteritie thy due desert afforde;
 And lett them all which heere of thy greates skill then saie
 Fare well, fare well thou prince of musicke now and aye;
 Fare well I say, fare well, fare well and here I end
 Fare well melodious Birde, fare well sweet musickes frende.
 All these things do I speake not for reward or bribe;
 Nor yet to flatter him or sett him upp in pride,
 Nor for affection or ought might moue there towe,
 But euen the truth reporte and that make known to yowe.
 Lo heere I end farewell, committing all to God,
 Who kepe us in his grace and shilde us from his rodd.
 Finis.— Jo Baldwine.

The two following motets, the one printed in the second part of the Gradualia, and the other in the Cantiones Sacrae, are evidences of the skill and abilities of this admirable church musician.

Of the latter of these compositions it is to be remarked that it is in eight parts, that is to say, Superius primus et secundus, Contratenor primus et secundus, Tenor primus et secundus, and Bassus primus et secundus; and that in the printed book each of these eight parts is in canon of two in one, recte et retro. The whole is in the judgment of some of the ablest musicians at this day living, a most stupendous contrivance.

VE - NI - TE ex - ul - te - mus

VE - NI - TE ex - ul - te - mus Do - mi - no, ex - ul - te - mus Do - mi -

VE - NI - TE ex - ul - te - mus Do - mi - no,

VE - NI - TE

Do - mi - no, Do - mi - no, ex - ul - te - mus Do - mi - no,

- no, ve - ni - te ex - ul - te - mus Do - mi - no, Do - mi -

ex - ul - te - mus Do - mi - no, ve - ni - te ex - ul - te - mus Do - mi -

- TE ex - ul - te - mus Do - mi - no, Ju - bi - le - mus Do - mi -

ve - ni - te ex - ul - te - mus Do - mi -

VE - NI - TE ex - ul - te - mus Do - mi - no, Do - mi -

Ju - bi - le - mus De - o, Ju - bi - le - mus De - o,
 - - no, Ju - bi - le - mus De - o, Ju - bi - le - mus
 - - ne, Ju - bi - le - mus De - o, De - - o, Ju - bi - le - mus De - o, Ju - bi -
 - - no, Ju - bi - le - mus De - o, Ju - bi - le - mus De - o,
 - - no, Ju - bi - le - mus De - o, Ju - bi - le - mus De - o,
 - - no, Ju - bi - le - mus De - o, Ju - bi - le - mus De - o,

Ju - bi - le - mus De - o, Ju - bi - le - mus De - o, sa - lu -
 De - o sa - lu - ta - ri nos - - tro, sa - lu - ta - ri nos - -
 - - le - mus De - o, Ju - bi - le - mus De - o sa - lu - ta - ri nos - - tro, sa - lu -
 Ju - bi - le - mus De - - o, sa - lu - ta - ri nos - -
 Ju - bi - le - mus De - o, De - - o, sa -
 Ju - bi - le - mus De - o, De - - o, sa - lu - ta - ri nos - -

- ta - ri nos - - tro, sa -
 - tro, sa - lu - ta - ri nos - - tro,
 - - ta - ri nos - tro, sa - lu - ta - ri nos - tro, sa - lu - ta - ri nos - -
 - - tro, sa - lu - ta - ri nos - - tro, sa - lu - ta - ri
 - - lu - ta - ri nos - tro, sa - lu - ta - ri nos - - tro,
 - - tro, sa - lu - ta - ri nos - - tro, sa - lu -

- lu - ta - ri nos - - - tro, præ - oc - cu -
 sa - lu - ta - ri nos - - - tro, præ - oc - cu - pe - mus fa - ci - em
 - tro, sa - lu - ta - ri nos - tro, præ - oc - cu -
 nos - tro, sa - lu - ta - ri nos - - - tro, præ - oc - cu - pe - mus
 sa - lu - ta - ri nos - - - tro, præ -
 - ta - ri, sa - lu - ta - ri nos - - - tro, .

pe - mus fa - ci - em e - - - jus, præ - oc - cu -
 e - - - jus, præ - oc - cu - pe - mus fa - ci - em e - - -
 - pe - mus fa - ci - em e - jus, præ - oc - cu - pe - mus fa - ci - em e - - -
 fa - ci - em e - jus, præ - oc - cu - pe - mus fa - ci - em e - -
 - oc - cu - pe - mus fa - ci - em e - jus,
 præ - oc - cu - pe - mus fa - ci - em e - - -

pe - mus fa - ci - em e - - - jus
 - jus, fa - ci - em e - - - jus
 - - - jus, fa - ci - em e - - - jus in con - fes - si -
 fa - ci - em e - - - jus in con - fes - si - o -
 - - - jus, fa - ci - em e - - - jus, e - - -

in . . con - fes - si - o - ne, in . . con -

in con - fes - si - o - ne, in . .

in con - fes - si - o - ne, in con - fes - si - o -

- o - - - - ne, in con - fes - si - o - - -

- - - - - ne, in con -

- jus in con - fes - si - o - - ne, . . .

- fes - si - o - - - ne, . . .

- con - fes - si - o - - - ne, Ju - bi - le - mus e - - -

- - - ne, et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - -

- - - ne, in con - fes - si - o - - - ne,

- - - fes - si - o - - - ne, Ju - bi - le - mus,

et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - -

et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - - i,

- i, Ju - bi - le - mus e - - -

- - - i,

et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - -

et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - - i,

- i,



et in Psal - mis Ju - bi - le - mus
 - - i, et in Psal - mis,
 et in Psal - mis Ju - bi - le - - - mus e - - i, Ju - - bi - le - mus
 - - i, e - - i, Ju - bi - le - mus e - - i, et in
 et in Psal - mis, et in Psal - mis, et . . in Psal - mis
 et in Psal - mis Ju - - bi - le - mus e - - i,



e - - - i, e - - - i, et in
 et in Psal - mis Ju - bi - le - mus, Ju - bi - le - mus e - - i,
 e - - - i, Ju - bi - le - mus, Ju - bi - le - mus e - - -
 Psal - mis Ju - bi - le - mus e - - - i, e - - -
 Ju - bi - le - mus e - - i, Ju - bi - le - mus, Ju - bi -
 et . . in Psal - mis Ju - bi - le - mus e - - i,



Psal - mis Ju - bi - le - mus e - - i, et in Psal - mis
 et in Psal - mis Ju - bi - le - mus e - - i, et in
 - - i, et in Psal - mis Ju - bi - le -
 - - i, Ju - bi - le - mus e - - i, et in Psal - mis Ju - bi - le - mus
 - - le - mus e - - i, e - - i, et in
 Ju - bi - le - mus, Ju - bi - le - mus e - - i, et in Psal - mis

Ju - bi-le-mus, Ju - bi-le-mus e - - i. . . . Al - le - lu - ia,
 Psal - mis Ju - bi-le-mus, Ju - bi-le-mus e - - i.
 - - mus e - - i, Ju - bi - le - mus e - - i. Al - le - lu - ia,
 e - - i, Ju - bi - le - - mus e - - i. Al - le - lu - ia,
 Psal - mis Ju - bi-le-mus e - - - - i. Al - le - lu - ia,
 Ju - bi-le-mus e - - i, Ju - bi-le-mus e - - i.

Al-le-lu - ia, Al-le-lu - ia, Al-le-lu - ia, Al-le-lu -
 Al - le - lu - ia, Al-le-lu - ia, Al-le-lu - ia,
 Al - le - lu - ia, Al-le-lu - ia, Al-le-lu - ia, Al - le - lu - ia, Al-le -
 Al - le - lu - ia, Al-le-lu - ia, Al-le-lu - ia, Al-le-lu - ia, Al-le-lu - ia, Al - le -
 Al - - le - lu - - ia, Al - -
 Al - le - lu - ia, Al - - le - lu - - ia,


- ia, Al - - le - lu - - - - ia,
 Al-le-lu - ia, Al-le-lu - ia, Al - le-lu -
 - lu - ia, Al-le-lu - ia, Al - le-lu - - - ia, Al - - le-lu - - - ia,
 - lu - ia, Al-le-lu - ia, Al - le-lu - ia, Al - le-lu - ia, Al -
 - le-lu - ia, Al - - le-lu - - - ia, Al - le -
 Al - - le-lu - ia, Al - le -

Al - le - lu - ia, Al - le - lu - ia, A - men,
 Al - le - lu - ia, A - men,
 le - lu - ia, A - men,
 lu - ia, Al - le - lu - ia, A - men,
 lu - ia, Al - le - lu - ia, A - men,
 men, A - men.
 A - men, A - men.
 men, A - men, A - men.
 A - men, A - men.
 men, A - men.
 men, A - men.

WILLIAM BIRD.

CANON RECTE ET RETRO.

DI - LI - GES Do - mi - num De - um tu - um, ex to - to cor - de tu - o,
 DI - LI - GES Do - mi - num De - um tu - um, De - um tu - um, ex
 DI - LI - GES Do - mi - num De - um tu - um, ex to - to cor - de tu - o, tu -
 DI - LI - GES Do - mi - num De - um tu - um, tu - um, ex to - to cor - de tu -
 DI - LI - GES Do - mi - num De - um tu - um, ex to - to cor - de tu - o, tu - o, . . . ex .
 DI - LI - GES Do - mi - num De - um tu - um, ex . . . to - to cor - de tu -
 DI - LI - GES Do - mi - num De - um tu - um, ex to - to cor - de tu -
 DI - LI - GES Do - mi - num De - um tu - um, tu - um, ex to - to



ex to-to cor-de et in to-ta a-ni-ma tu-a, a-ni-ma tu-
to-to cor-de tu-o, cor-de tu-o, et in to-ta
o, ex to-to cor-de tu-o, et in to-
o, ex to-to cor-de tu-o, et in to-ta a-ni-ma tu-a, tu-
. . to-to cor-de tu-o, ex to-to cor-de tu-o, et in to-ta a-ni-ma tu-a, .
o, tu-o, ex to-to cor-de.. tu-o, et in to-ta a-ni-ma, et
o, ex to-to cor-de tu-o, et in to-ta a-ni-ma tu-
cor-de tu-o, et in to-ta a-ni-ma tu-a, . . .



a, et in to-ta men-te tu-a, men-te tu-a, in men-te tu-
a-ni-ma tu-a, tu-a, et in to-ta men-te tu-a, tu-
ta a-ni-ma tu-a, et in men-te tu-a, tu-
a, et in to-ta men-te tu-a, in men-te tu-
. . a-ni-ma tu-a, et in to-ta men-te tu-a, tu-
in to-ta a-ni-ma tu-a, et.. in to-ta men-te tu-a, men-te tu-a, tu-
a, et in to-ta men-te tu-a, in men-te tu-
et in to-ta men-te tu-a, . . . et in to-ta men-te tu-a, . . .

- a, Di - li - ges prox - i - mum tu - um, tu - um, Di - li - ges prox - i - mum

- a, Di - li - ges prox - i - mum tu - um, tu - - um, si - cut te ip - sum,

- a, Di - li - ges prox - i - mum tu - um, si - cut te ip - sum, te ip - sum, Di -

- a, Di - li - ges prox - i - mum tu - um, Di - li - ges prox - i - mum tu -

- a, Di - li - ges prox - i - mum tu - um, si - cut te ip - - sum prox - i - mum tu - um, si -

- a, Di - li - ges prox - i - mum tu - um, si - cut te ip - sum, si - cut te ip -

- a, Di - li - ges prox - i - mum tu - um, Di - - li - ges prox - i -

- a, Di - li - ges prox - i - mum tu - um, si - cut te ip - sum,

. . tu - um, si - cut te ip - sum, Di - li - ges prox - i - mum tu - um, si -

Di - li - ges prox - i - mum tu - um, tu - um, si - cut te ip - sum, si - cut

- li - ges prox - i - mum tu - um, si - cut te ip - sum, Di - li - ges prox - i -

- um, si - cut te ip - sum, si - cut te ip - sum, si - cut te ip - sum,

- cut te ip - sum, te ip - sum, Di - li - ges prox - i - mum tu - um si - cut te ip - sum, prox -

- sum, prox - i - mum tu - - um, si - cut te . ip - sum, Di - li - ges prox - i - mum tu - um, si - cut

- mum tu - um, prox - - i - mum tu - um, si - cut te ip - sum, Di - li - ges

prox - i - mum tu - um, si - cut te ip - sum, prox - i - mum tu - um, si - cut te ip - sum,

cut te ip-sum, Di-li-ges prox-i-mum tu-um, si-cut te ip-sum, ip-sum.
 te ip-sum, Di-li-ges prox-i-mum tu-um, si-cut te ip-sum, te ip-sum.
 -mum tu-um, . . si-cut te ip-sum, Di-li-ges prox-i-mum, si-cut te ip-sum.
 Di-li-ges prox-i-mum tu-um, prox-i-mum tu-um, si-cut te ip-sum, te ip-sum.
 -i-mum tu-um, si-cut te ip-sum, si-cut te ip-sum, si-cut te ip-sum.
 . . . te ip-sum, si-cut te ip-sum, Di-li-ges prox-i-mum tu-um, si-cut te ip-sum.
 si-cut te ip-sum, prox-i-mum tu-um, si-cut te ip-sum.
 Di-li-ges prox-i-mum tu-um, si-cut te ip-sum, te ip-sum.

WILLIAM BIRD.

CHAP. XCVII.

ALFONSO FERABOSCO, as Dr. Wilson used to say, was born of Italian parents, at Greenwich in Kent. He never arrived to any academical honours in the faculty of music, nor does it appear that he had even any employment in the royal chapel, or about court; * nevertheless he is ranked among the first musicians of Elizabeth's time. Morley says that in a virtuous contention betwixt them, he and Bird made about forty waies, as he terms it, upon the plain-song of a certain Miserere; and Peacham speaks of another between the same persons, to wit, who of the two should best set the words of a certain ditty, 'The Nightingale so pleasant and so gay,' in which Ferabosco succeeded so well, that, in the judgment of Peacham, this composition, as also another of his, 'I saw my lady weeping,' for five voices, cannot be bettered for sweetness of air and depth of judgment.†

He had a son of the same Christian name, who for that reason is often mistaken for his father; he was the author of a book with this simple title, 'Ayres by Alfonso Ferabosco,' printed in folio, 1609, with the following commendatory verses by Ben Johnson:—

To my excellent friend Alfonso Ferrabosco.
 To urge my lov'd Alfonso that bold fame
 Of building townes and making wild beasts tame
 Which musique had; or speak her known effects,
 That she removeth cares, sadness ejects,
 Declineth anger, persuades clemency,
 Doth sweeten mirth and heighten pietie,

* In Rymer's *Fœdera* Vol. 16, page 611, is a grant of an annuity of £50 a year to Alfonso Ferabosco, who is thus described, "one of the extraordinary grooms of our privy chamber." The grant is dated 22nd March, 1605, and is said to be made in regard of Ferabosco's attendance upon prince Henry, and instructing him in the art of music. The annuity is to be paid quarterly from the previous Christmas.

† Both printed in the *Musica Transalpina*, published by N. Yonge in 1588.

And is't a body often ill inclin'd,
 No less a sovereign cure then to the mind.
 T' alledge that greatest men were not asham'd
 Of old, even by her practice to be fam'd,
 To say, indeed, she were the soul of heaven,
 That the eight sphere, no less than planets seaven
 Mov'd by her order, and the ninth more high,
 Including all were thence call'd harmony;
 I yet had utter'd nothing on thy part,
 When these were but the praises of the art,
 But when I have said the proofes of all these be
 Shed in thy songs, 'tis true, but short of thee.

Besides these verses, there are prefixed to the book the following:—

Musick's maister and the offspring
 Of rich musick's father,
 Old Alfonso's image living,
 These fair flowers you gather
 Scatter through the British soile;
 Give thy fame free wing,
 And gaine the merit of thy toyle.
 We whose loves affect to praise thee,
 Beyond thine own deserts can never raise thee.

By T. Campion, Doctor in Physicke.‡

Besides the two above-mentioned, there was another named John, of the family of Ferabosco, a musician also, as appears by an evening service of his composing, in D, with the major third, well known in Canterbury and other cathedrals; as one of the

‡ Of this Thomas Campion, Wood says, *Fasti*, vol. I. pag. 229, that he was an admired poet and musician; there is extant of his an *Art of Poesie* in 12mo; and it appears that he wrote the words of a masque represented in the banquetting-room at Whitehall on St. Stephen's night, 1614, on occasion of the marriage of Carr earl of Somerset and the lady Frances Howard, the divorced countess of Essex, the music to which was composed by Nicolas Laniere, John Cooper, or Coperario, as he affected to call himself, and others. One of that name, a Dr. Thomas Campion, supposed to be the same person, was the author of a book entitled 'A new way of making four parts in counterpoint,' and of another entitled 'The art of setting or composing music in parts,' printed at the end of Playford's Introduction, the second edition, 1666, with annotations by Christopher Simpson.

same surname was formerly organist of Ely minster, it is not improbable but that the above person was he. A few years ago there was a Mostyn Ferabosco, a lieutenant in the royal navy, from which circumstance it is very probable that the family is yet in being.

WILLIAM BLITHEMAN, a gentleman of queen Elizabeth's chapel, and one of the organists of the same, is by Wood [Fasti, anno 1586,] celebrated as the excellent master of the famous Dr. John Bull. He died greatly lamented on Whitsunday, 1591, and was buried in the parish church of St. Nicholas Cole-Abbey, London. The following epitaph was engraven on a brass plate and fixed in the wall of the church, but being destroyed in the fire of London, it is now only to be found in Stow's Survey,* and is as follows :—

Here Blitheman lies, a worthy wight,
Who feared God above,
A friend to all, a foe to none,
Whom rich and poore did loue ;
Of princes chappell gentleman
Unto his dying day,
Whom all tooke great delight to heare
Him on the organs play ;
Whose passing skill in musickes art
A scholar left behinde,
John Bull by name, his masters uceine
Expreffing in each kinde ;
But nothing here continues long,
Nor resting place can haue,
His soule departed hence to heauen,
His body here in graue.

It seems that as a musician Blitheman's performance on the organ was his greatest excellence. Wood, who was likely to have known it, had he been a composer for the church, gives not the least hint to favour an opinion of the kind ; in short, he was a singular instance of a limited talent in the science of his profession.

JOHN BULL (*a Portrait*,) was born in Somersetshire, about the year 1563, and, as it is said, was of the Somerset family. He was educated under Blitheman before-named. In 1586 he was admitted at Oxford to the degree of bachelor of music, having practised in that faculty fourteen years ; and in 1592 was created doctor in the university of Cambridge. In 1591 he was appointed organist of the queen's chapel in the room of his master, Blitheman.

Bull was the first Gresham professor of music, and was appointed to that station upon the special recommendation of queen Elizabeth. However skilful he might be in his profession, it seems that he was not able to read his lectures in Latin ; and therefore, by a special provision in the ordinances respecting the Gresham professors, made anno 1597, it is declared, that because Dr. Bull is recommended to the place of music professor by the queen's most excellent majesty, being not able to speak Latin, his lectures are permitted to be altogether English, so long as he shall continue music professor there.†

* Stow, in the second, and probably in the first edition of his Survey, mentions that Blitheman, an excellent organist of the queen's chapel, lay buried there with an epitaph. In a subsequent edition, published in 1633, with additions, by A. M. [Anthony Munday] and others, the epitaph as above is inserted.

† In this instance it seems that the queen's affection for Bull got the better of her judgment, for not being able to speak Latin, it may be presumed that he was unable to read it ; and if so, he must have been ignorant of the very principles of the science, and consequently but very indifferently qualified to lecture on it even in English.

In the year 1601, he went abroad for the recovery of his health, which at that time was declining ; and during his absence was permitted to substitute as his deputy a son of William Bird, named Thomas. He travelled incognito into France and Germany ; and Wood takes occasion to relate a story of him while abroad, which the reader shall have in his own words :—

'Dr. Bull hearing of a famous musician belonging to a certain cathedral at St. Omer's, he applied himself as a novice, to him, to learn something of his faculty, and to see and admire his works. This musician, after some discourse had passed between them, conducted Bull to a vestry or music-school joining to the cathedral, and shewed to him a lesson or song of forty parts, and then made a vaunting challenge to any person in the world to add one more part to them, supposing it to be so complete and full that it was impossible for any mortal man to correct or add to it ; Bull thereupon desiring the use of pen, ink, and ruled paper, such as we call musical paper, prayed the musician to lock him up in the said school for two or three hours ; which being done, not without great disdain by the musician, Bull in that time or less, added forty more parts to the said lesson or song. The musician thereupon being called in, he viewed it, tried it, and retried it ; at length he burst out into a great ecstasy, and swore by the great God that he that added those forty parts must either be the Devil or Dr. Bull, &c.‡ Whereupon Bull making himself known, the musician fell down and adored him. Afterwards continuing there and in those parts for a time, he became so much admired, that he was courted to accept of any place or preferment suitable to his profession, either within the dominions of the emperor, king of France, or Spain ; but the tidings of these transactions coming to the English court, queen Elizabeth commanded him home.' Fasti, anno 1586.

Dr. Ward, who has given the life of Dr. Bull in his Lives of the Gresham professors, relates that upon the decease of queen Elizabeth he became chief organist to king James,§ and had the honour of entertaining his majesty and prince Henry at Merchant Taylors' hall with his performance on the organ ; the relation is curious, and is as follows :—

'July the 16, 1607, his majesty and prince Henry, with many of the nobility, and other honourable persons, dined at Merchant Taylors' hall, it being the election-day of their master and wardens ; when the company's roll being offered to his majesty, he said he was already free of another company, but that the prince should grace them with the acceptance of his freedom, and that he would himself see when the garland was put on his head, which was done accordingly. During their stay they were entertained with a great variety of music, both voices and instruments, as likewise with several

‡ An exclamation perhaps suggested by the recollection of that of Sir Thomas More, 'Aut tu es Erasmus, aut Diabolus.'

§ The fact is that he succeeded Tallis, and was sworn in his room, Jan. 1585 [Cheque book]. He was also in the service of prince Henry ; the name John Bull, doctor of music, stands the first in the list of the prince's musicians in 1611, with a salary of 40*l.* per annum. Append. to the Life of Henry Prince of Wales by Dr. Birch.

'speeches. And while the king sat at dinner, Dr. Bull (who as Stow says) was free of that company, being in a citizen's gowne, cappe, and hood, played 'most excellent melodie uppon a small payre of 'organs, placed there for that purpose onely.' The author proceeds to relate that in 1613 Bull quitted England, and went to reside in the Netherlands,* where he was admitted into the service of the archduke. Wood† says that he died at Hamburg, or rather, as others who remembered the man have said, at Lubec.

A picture of Dr. Bull is yet remaining in the music-school at Oxford. It is painted on a board, and represents him in the habit of a bachelor of music. On the left side of the head are the words AN. AETATIS SVAE 26. 1589; and on the right side an hour-glass, upon which is placed a human skull, with a bone cross the mouth; round the four sides of the frame is written the following homely distich:—

'The bull by force in field doth raigne,
'But Bull by skill good will doth gayne.'

BOOK XI. CHAP. XXVIII.

JOHN DOWLAND, the famous lutenist, was born in 1562, and admitted to his bachelor's degree together with Morley. [Wood Fasti anno 1588.§] The

* Dr. Ward suggests as the reason for Bull's retirement, that the science began to sink in the reign of king James, which he infers from that want of court patronage which it seems induced the musicians of that day to dedicate their works to one another. There is some truth in this observation, but see the next note. Morley complains of the lack of Meccenates in his time, for notwithstanding the love which queen Elizabeth bore to music, the professors of it began to be neglected even in her reign. John Boswell, who in 1573 published a book entitled 'Workes of Armorie,' describing a coat-armour in which are organ-pipes, uses this exclamation, 'What say I, music one of the seven liberal sciences; it is almost banished the realme. If it were not the queenes majesty that did favour that excellent science, singing-men and choristers might go a-begging, together with their master the player on the organs.'

As to singing-men in general, not to speak of the gentlemen of the royal chapel, who appear at all times to have been a set of decent orderly men, and many of them exquisite artists in their profession, they seem to have had but little claim to the protection of their betters. Dr. Knight, in his Life of Dean Colet, pag. 87, represents the choirmen about the time of the reformation as very disorderly fellows; as an instance whereof he relates that one at St. Paul's, and a priest too, in the time of divine service, flung a bottle down upon the heads of the congregation. And Cowley, in a poem of his entitled 'The Wish,' printed in his Sylva, has these lines:—

'From singing-men's religion, who are
'Always at church, just like the crows,' 'cease there
'They build themselves a nest;
'From too much poetry, which shines
'With gold in nothing but its lines,
'Free, O ye pow'rs, my breast.'

Osborne, somewhere in his works, represents them as lewd and dissolute fellows in his time; and Dr. Earle, who lived some years after Osborne, and, being a dignitary of the church, must be supposed acquainted with their manners, gives the following character of them, perhaps not less just than it is humorous:—

'The common singing-men are a bad society, and yet a company of good fellows, that roar deep in the quire, deeper in the tavern. They are the eight parts of speech which go to the Syntaxis of service, and are distinguished by their noises much like bells, for they make not a concert but a peal. Their pastime or recreation is prayers, their exercise drinking, yet herein so religiously addicted, that they serve God oftener when they are drunk. Their humanity is a leg to the Residencior, their learning, a chapter, for they learn it commonly before they read it; yet the old Hebrew names are little beholden to them, for they miscall them worse than one another. Though they never expound the scripture they handle it much, and pollute the Gospel with two things, their conversation and their thumbs. Upon worky-days they behave themselves at prayers as at their pots, for they swallow them down in an instant. Their gowns are laced commonly with streamings of ale, the superfluities of a cup or throat above measure. Their skill in melody makes them the better companions abroad, and their anthems abler to sing catches. Long lived for the most part they are not, especially the base, they overflow their banks so oft to drown the organs. Briefly, if they escape arresting, they die constantly in God's service; and to take their death with more patience, they have wine

The only works of Bull in print are lessons in the collection entitled 'Parthenia, or the maiden-head of the first music that ever was printed for the virginals,' of which mention has already been made. An anthem of his, 'Deliver me, O God,' is to be found in Barnard's Collection of Church-music.

Dr. Ward has given a long list of compositions of Dr. Bull in manuscript in the collection of the late Dr. Pepusch, by which it appears that he was equally excellent in vocal and instrumental harmony. By some of the lessons in the Parthenia it seems that he was possessed of a power of execution on the harpsichord far beyond what is generally conceived of the masters of that time. As to his lessons, they were, in the estimation of Dr. Pepusch, not only for the harmony and contrivance, but for air and modulation, so excellent, that he scrupled not to prefer them to those of Couperin, Scarlatti, and others of the modern composers for the harpsichord.‡

same author says that he was the rarest musician that his age did behold, which, though he was

'and cakes at their funeral; and now they keep the church a great deal better, and help to fill it with their bones as before with their noises.' 'Microcosmography, or a piece of the world discovered in essays and characters,' printed without a name in 1633, but in a subsequent edition of 1733, ascribed to Dr. John Earle, successively bishop of Worcester and Salisbury.

James I. though it does not appear that he understood or loved music, yet was disposed to encourage it, for, after the example of Charles the Ninth of France, who had founded a musical academy, he by his letters patent incorporated the musicians of London, who are still a society and corporation, and bear for their arms Azure, a swan Argent within a treasure counterfure Or; and in a chief Gules, a rose between two lions, Or: and for their crest the sign called by astronomers the Orphean lyre. See the dedication to the Principles of Harmony by Charles Butler.

By this act of regal authority the only one of the liberal sciences that conferred the degree of Doctor, was itself degraded, and put upon a footing with the lowest of the mechanic arts; and under the protection of their charter the honourable fraternity of musicians of the city of London derive the sole and exclusive privilege of fiddling and trumpeting to the mayor and aldermen, and of scrambling for the fragments of a city feast.

† Bull had none of those reasons to complain of being slighted that others of his profession had. He was in the service of the chapel, and at the head of the prince's musicians; in the year 1604 his salary for the chapel duty had been augmented. The circumstance of his departure from England may be collected from the following entry, now to be seen in the cheque book, '1613, John Bull, doctor of music, went beyond the seas without license, and was admitted into the archduke's service, and entered into pale there about Mich. and Peter Hopkins a base from Paul's was sworn into his place the 27th of Dec. following: His wages from Mich. unto the days of the swearing of the said Peter Hopkins was disposed of by the Deane of his majesty's chapel.' By this it should seem that Bull was not only one of the organists, but a gentleman of the chapel.

‡ This is a fact which several persons now living can attest, together with the following curious particulars. The doctor had in his collection a book of lessons very richly bound, which had once been queen Elizabeth's; in this were contained many lessons of Bull, so very difficult, that hardly any master of the Doctor's time was able to play them. It is well known that Dr. Pepusch married the famous opera singer, Signora Margarita De L'Pine, who had a very fine hand on the harpsichord: as soon as they were married, the Doctor inspired her with the same sentiments of Bull as he himself had long entertained, and prevailed on her to practise his lessons, in which she succeeded so well, as to excite the curiosity of numbers to resort to his house at the corner of Bartlett's Buildings in Fetter-Lane, to hear her. There are no remaining evidences of her unwearied application in order to attain that degree of excellence which it is known she arrived at, but the book itself yet in being, which in some parts of it is so discoloured by continual use, as to distinguish with the utmost degree of certainty the very lessons with which she was most delighted. One of them took up twenty minutes to go through it.

§ Wood says he was one of the gentlemen of her majesty's chapel, but the truth of this assertion is doubtful; for he does not assume that title in any of his publications: on the contrary, he complains in the preface to his Pilgrime's Solace, that he never could attain to any though ever so mean a place.

doubtless an eminent composer, is not so true as that he was one of the most excellent lutenists of his time. Mention is made of him in a sonnet ascribed to Shakespeare, but how truly we cannot say. It is entitled *Friendly Concord*, and is as follows :—

'If musicke and sweet poetry agree,
'As they must needs (the sister and the brother),
'Then must the love be great twixt thee and me,
'Because thou lov'st the one and I the other;
'Dowland to thee is deer, whose heavenly touch
'Upon the lute doth ravish human sense;
'Spenser to me whose deep conceit is such,
'As passing all conceit, needs no defence;
'Thou lov'st to hear the sweet melodious sound
'That Phœbus' lute (the queen of musick) makes,
'And I in deep delight am chiefly drown'd,
'When as himself to singing he betakes :
'One God is God of both, as poets faine;
'One knight loves both, and both in thee remain.'*

Peacham, who was intimate with him, says that he had slipped many opportunities of advancing himself, in allusion to which his misfortune he gave him an emblem with this anagram,

JOHANNES DOVLANDUS

Annos ludendo hausi.

The emblem is a nightingale singing in the winter season on a leafless brier, with the following verses :—

'Heere Philomel in silence sits alone,
'In depth of winter, on the bared brier,
'Whereas the rose had once her beautie shoven,
'Which lordes and ladies did so much desire :
'But fruitless now ; in winter's frost and snow
'It doth despis'd and unregarded grow.
'So since (old frend) thy yeares have made thee white,
'And thou for others hast consum'd thy spring,
'How few regard thee, whome thou didst delight,
'And farre and neere came once to heare thee sing !
'Ingratefull times, and worthless age of ours,
'That lets us pine when it hath cropt our flowers.'†

That Dowland missed many opportunities of advancing his fortunes may perhaps be justly attributed to a rambling disposition, which led him to travel abroad and neglect his duty in the chapel ; for that he lived much abroad appears from the prefaces to his works, published by him at sundry times, and these furnish the following particulars of his life.

In the year 1584 he travelled the chief parts of France ; thence he bent his course towards Germany, where he was kindly entertained by Henry Julio, duke of Brunswick, and the learned Maurice, landgrave of Hessen, the same of whom Peacham speaks, and commends as being himself an excellent musician. Here he became acquainted with Alessandro Orologio, a musician of great eminence in the service of the landgrave Maurice, and Gregorio Howet, lutenist to the duke of Brunswick. Having spent some months in Germany, he passed over the Alps into Italy, and saw Venice, Padua, Genoa, Ferrara, Florence, and divers other places. At Venice he became intimate with Giovanni Croce, who, as he relates, was at that time vice-master of the chapel of St. Mark. It does

not appear that he visited Rome, but he enjoyed the proffered amity of Luca Marenzio, and received from him sundry letters, one whereof was as follows :—

'Multo magnifico Signior mio osservandissimo.
'Per una lettera del Signior Maluzzi ho inteso
'quanto con cortese affetto si mostri desideroso di
'essermi congionto d'amicitia, deve infinitamente la
'ringratio di questo suo buon' animo, offerendo
'megli all' incontro se in alcuna cosa la posso servire,
'poi che gli meriti delle sue infinite virtù, et qualità
'meritano che ogni uno et me l' ammirino et oser-
'vino, et per fine di questo le bacio le mani. Di
'Roma à 13 di Luglio 1595. d. v. s. Affettionatissimo
'servitore, Luca Marenzio.'

All these particulars are contained in a work of Dowland entitled '*The first booke of Songes or Ayres of foure Parts with Tablature for the Lute.*' In a second book of Songs or Aires by Dowland for the lute or Orpherian, with the viol de gamba, printed in 1600, he styles himself lutenist to the king of Denmark ; to this book is prefixed a dedication to the celebrated Lucy countess of Bedford, dated from Helsingnoure in Denmark the first of June, 1600.

In 1603 he published a third book of '*Songes or Aires to sing to the lute, Orpharion, or Violla.*' Some time after this, but in what year is not mentioned, he published a work with this title '*Lachrimæ, or seaven Teares figured in seaven passionate Pavans, with divers other Pavans, Galiards, and Almands, set forth for the Lute, Viola, or Violons, in five parts.*'‡ This book is dedicated to Anne, the queen of king James the First, and sister of Christian IV. king of Denmark. In the epistle the author tells her that hastening his return to her brother and his master, he was by contrary winds and frost, forced back and compelled to winter in England, during his stay wherein, he had presumed to dedicate to her hands a work that was begun where she was born, and ended where she reigned.

In 1609 Dowland published a translation of the *Micrologus* of Andreas Ornithoparcus ; at this time it seems that Dowland had quitted the service of the king of Denmark, for he styles himself only lutenist, lute-player, and bachelor of music in both universities. In 1612 he published a book entitled '*A Pilgrime's Solace*, wherein is contained musical harmony of 3, 4, and 5 parts to be sung and plaid with lute and 'viols.' In the title-page he styles himself lutenist to the Lord Walden.§ In the preface to this book

† This it seems was a celebrated work : it is alluded to in a comedy of Thomas Middleton, entitled '*No wit like a woman's*,' in which a servant tells bad news, and is thus answered :—

'Now thou playest Dowland's Lachrymas to thy master.'

§ Wood is greatly mistaken in the account which he gives of Dowland, whom he supposes to have been taken into the service of the king of Denmark in 1606, whereas it is plain that he was his lutenist in 1608, and probably somewhat before ; again, there is not the least reason to suppose, as Wood does, that he died in Denmark, for he was in England in 1612, and lutenist to Lord Walden ; and it nowhere appears that after this he went abroad. He might, as he says, have a son named Robert trained up to the lute at the charge of Sir Thomas Monson, who it is well known was a great patron of music ; but that the *Pilgrime's Solace* was composed by him and not by his father, is not to be reconciled with the title, the dedication, or the preface to the book, which afford the best evidence of the fact that can be required. It may not be improper here to mention that the king of Denmark had begged Dowland of James, as he did afterwards Thomas Cutting, another celebrated lutenist, of his mistress the lady Arabella Stuart.

* From the *Passionate Pilgrime* of Shakespeare, first printed in 1609, and Poems written by Wm. Shakespeare, Gent. 12mo. 1640.

† Garden of Heroical Devices by Henry Peacham, pag. 74.

he says that he had received a kingly entertainment in a foreign climate, though he could not attain to any, though never so mean, place at home. He says that some part of his poor labours had been printed in eight most famous cities beyond the seas, viz., Paris, Antwerpe, Collein, Nuremburg, Frankfort, Liepsig, Amsterdam, and Hamburg, but that notwithstanding he had found strange entertainment since his return by the opposition of two sorts of people, the first simply Cantors or vocal singers, the second young men professors of the lute, against whom he vindicates himself. He adds that he is entered into the fiftieth year of his age, and because he wants both means, leisure, and encouragement, recommends to the more learned sort of musicians, who labour under no such difficulties, the defence of their lute-profession.

The preface of Dowland to this his translation of *Ornithoparcus* is dated from his house in Fetter-lane, 10th of April, 1609. This is the last of his publications, for it appears that he died in 1615.

PETER PHILLIPS, an Englishman by birth, better known to the world by the Italian name Pietro Philippi, was an exquisite composer of vocal music both sacred and profane. He styles himself *Canonicus Sogniensis*, i. e. a canon of Soigny, a city or town in Hainault, and was besides organist to the archduke and duchess of Austria, Albert and Isabella, governors of the Low countries. Peacham calls him our rare countryman, one of the greatest masters of music in Europe, adding, that he hath sent us over

many excellent songs, as well motets as madrigals, and that he affecteth altogether the Italian vein. The works published by him, besides the collection of madrigals entitled *Melodia Olympica*, heretofore mentioned, are *Madrigali à 8 voci*, in 4to. an. 1599. *Cantiones sacræ 5 vocum*, in 4to. an. 1612. *Gemmulæ sacræ 2 et 3 vocum*, in 4to. an. 1613. *Litanie B. M. V. in Ecclesia Loretana cani solitæ 4, 5, 9 vocum*, in 4to. an. 1623. He is celebrated by Drandius in his *Bibliotheca Classica*.

His employments and the nature of his compositions for the church bespeak him to have been of the Romish communion. The *Cantiones Sacræ* are dedicated to the Virgin Mary in the following terms:—

'Gloriosissimæ Virgini Mariæ, Dei nostri parenti dignissimæ, cœli, terræque reginæ, angelorum, hominum, et omnium creaturarum visibilium, et in visibilium post Deum Dominæ: in honorem ejus sacræ ædis Aspricollis, ubi ad D. O. M. gloriam, Christiani populi consolationem, et salutem; Catholicæ, Apostolicæ, et Romanæ fidei confirmationem, et amplificationem; cunctarum hæresum, et hæreticorum extirpationem, et confusionem, per potentissimam ejus interventionem, frequentissima, divinissima, et exploratissima patrantur miracula, hoc sacrarum canticum opusculum Petrus Philippi cum omni humilitate offert, dicat consecratque.'

The following madrigal, printed in the *Melodia Olympica*, is of the composition of Peter Phillips:—

VOI vo - le - te ch'io muo - ia, E mi da - te, Do - lor si cru - d'e . . for -

VOI vo - le - te ch'io muo - ia, E mi da - te, Do - lor si crud'e for - . .

VOI vo - le - te ch'io muo - ia, E mi da - te, Do - lor si cru - d'e for - . .

VOI vo - le - te ch'io muo - ia, E mi da - te, Do - lor si cru - . . .

- - te, si cru - d'e for - - e, Che mi con - du - ce a mor - - te, che mi

- - te, si crud'e for - - - te. Che . mi con - du - ce a mor - te, che mi .

- - te, si cru - d'e for - - te, Che . . mi con - du - ce a mor - te,

- - d'e for - - - - te, Che mi

con - du - ce a mor - te, che mi con - du - ce a . mor - te,
 . . . con - du - ce a mor - te, che mi con - du - ce a mor - te, che mi con - du - ce a mor - te,
 che . mi con - du - ce a mor - - te, che mi con - du - ce a mor - te,
 con - du - ce a mor - te, che mi . con - du - ce a mor - - te,

ma per ve - der ne voi co - si con - ten - - ta men - tr'io mo - r'ìl mo -
 ma per ve - der ne voi co - si con - ten - - ta men - tr'io mo - r'ìl mo -
 ma per ve - der ne voi co - si con - ten - - ta men - tr'io mo - r'ìl mo -
 ma per ve - der ne voi co - si con - ten - - ta

- - rir vi - ta di - ven - - ta on - de ve - dend' ohi - mi! . . . ohi -
 - - rir vi - ta di - ven - ta, vi - ta di ven - ' ta on - de ve - dend' ohi - mi ohi -
 - - rir vi - ta di - ven - - ta, vi - ta di ven - ta on - de ve - dend' ohi -
 men - tr'io mo - r'ìl mo - rir vi - ta di - ven - ta on - de ve - dend' ohi - mi! do -

- - mi! do - len - te vo - - i, In ques - ta vi - ta po - i, mi
 - - mi! do - len - te voi, do - len - te vo - i, In ques - ta vi - ta po - i, mi
 - - mi! . . . ohi - mi! do - len - te vo - i, In ques - ta vi - ta po - i, mi
 - len - te vo - - i, do - len - te vo - i, In ques - ta vi - ta po - i,

vien tan-to . . mar-ti - re, mi vien tan-to . . mar-ti - re, Ch'ogn' or giung'al .
 vien tan-to . . mar-ti - re, tan-to . . mar-ti - re, tan-to . . mar-ti - re, Ch'ogn' or giung'al .
 vien tan-to . . mar-ti - re, tan-to . . mar-ti - re, tan-to . . mar-ti - re, Ch'ogn' or giung'al
 mi vien tan-to . . mar-ti - re, Ch'ogn' or giung'al .

. . . mo-ri - re, giung' al mo - ri - re, E co - si mil-le mil-le volt'il
 . . . mo-ri - re, giung' al - mo - ri - re, E co - si mil-le mil-le volt'il giorno,..
 mo - rire, giung' al mo - ri - - - re, . . . E
 . . . mo-ri - re, giung' al mo - ri - re, . . . E co - -

giorno, E co - si mil - le mil-le volt'il gior - no, E co - si mil-le
 . . . E co - si mil-le mil-le volt'il, gior - no, mil - le mil-le mil-le gior - no, E
 co - si mil - le mil-le volt'il gior - no, mil-le mil-le volt' il giorno, mil - le
 - si mil - le, mil-le volt'il gior - no, mil - le mil-le volt' - il gior - no,

mil-le volt'il gior - no, per voi mo - ro, per voi .
 co-si mil-le mil-le volt'il gior - no, . . . per . voi . mo - ro,
 mil-le volt'il gior - no, per voi mo - - - ro, per voi mo - ro, per
 E co - si mil - le mil - le volt' - il gior - no, per voi



... mo - - - ro e mo-ren - do, e mo-ren - do, e mo-ren - do
 per voi mo - re e mo-ren - do, e mo-ren - do, mo-rend' in vi - ta .
 voi mo - ro, e . . . mo-ren - do, e . . . mo-ren - do, e mo-ren - do in
 mo . . . ro, e mo-ren - do in vi-ta -



in vi-ta tor - no, in vi-ta torno, in vi - ta tor - - - no.
 . . . tor-no, . . . e . . . mo-rend' . in vi-ta tor - no, in vi - ta tor - no.
 vi-ta tor - no, in vi-ta torn' - in vi-ta torn' in vi - ta tor - - - no.
 tor - no, in vi-ta tor - no, in vi-ta tor - no, in vi - ta tor - - - no.

PIETRO PAULIPPI.



